

OCCUPATIONAL INJURIES & ILLNESSES KANSAS, 1998



Kansas Department of Health & Environment
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OCCUPATIONAL INJURIES & ILLNESSES KANSAS, 1998

Office of Health Care Information
CHES, KDHE
Topeka, Kansas

Bill Graves, Governor

Clyde D. Graeber, Secretary
Kansas Department of Health and Environment



Prepared by
Kansas Department of Health and Environment
Center for Health and Environmental Statistics
Office of Health Care Information

In cooperation with the U.S. Department of Labor
Bureau of Labor Statistics

Acknowledgment

A special thanks to all employers who responded to our survey, without their cooperation this report would not have been possible.

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Table of Contents

	Page
Introduction	1
Part I, 1996 Survey Highlights	5
Part II, Case Characteristics	21
Appendices	51
Preparation Credits	63

Charts

1. Nonfatal Occupational Injury and Illness Incidence Rates By Private Industry, Kansas & U.S., 1991 through 1998	5
2. Nonfatal Occupational Injury and Illness Incidence Rates By Private Industry, Kansas & U.S., 1998	6
3. Number of Nonfatal Occupational Injuries By Extent of Injury, Kansas, 1998	7
4. Number of Nonfatal Occupational Illnesses By Extent of Illness, Kansas, 1998	8
5. Number of Nonfatal Occupational Illnesses, By Type of Illness, Kansas, 1998	8
6. Nonfatal Occupational Illnesses Incidence Rates By Industry, Kansas, 1997 & 1998	9
7. Nonfatal Occupational Illness Incidence Rates for Manufacturing By Industry, Kansas 1997 & 1998	10
8. Nonfatal Occupational Injury and Illness Percentages By Sex & Industry, Kansas, 1998	22
9. Nonfatal Occupational Injury and Illness Percentages By Occupation, Kansas & U.S., 1998	23

Charts - continued

10.	Nonfatal Occupational Injury and Illness Percentages By Race or Ethnic Origin, Kansas & U.S., 1998	24
11.	Nonfatal Occupational Injury and Illness Percentages By Industry Type, Kansas, 1998	25
12.	Number of Nonfatal Occupational Injuries and Illnesses By Major Industry Division, Kansas, 1998	25
13.	Nonfatal Occupational Injury and Illness Percentages By Nature of Injury or Illness, Kansas, 1997 & 1998	26
14.	Nonfatal Occupational Injury and Illness Percentages By Part of Body, Kansas, 1998	27
15.	Nonfatal Occupational Injury and Illness Percentages By Event or Exposure, Kansas, 1998	27
16.	Nonfatal Occupational Injury and Illness Percentages By Source of Injury or Illness, Kansas, 1998	28
17.	Number of Nonfatal Occupational Injuries and Illnesses By Occupation and Median Days Away from Work, Kansas, 1997 & 1998	29
18.	Number of Nonfatal Occupational Injuries and Illnesses By Age Group and Median Days Away from Work, Kansas, 1998	29
19.	Median Days Away from Work By Selected Type of Injury or Illness, Kansas & U.S., 1998	30

Tables

1.	Incidence Rates of Nonfatal Occupational Injuries and Illnesses, By Industry, Kansas, 1991 - 1998	6
2.	Number of Nonfatal Occupational Injuries and Illnesses By Industry and Selected Case Types, Kansas, 1998	12
3.	Incidence Rates of Nonfatal Occupational Injuries and Illnesses By Industry and Selected Case Types, Kansas, 1998	14
4.	Incidence Rates of Nonfatal Occupational Injuries and Illnesses By Industry, Kansas & U.S., 1997 & 1998	16
5.	Incidence Rates of Nonfatal Occupational Injuries and Illnesses By Selected Case Types, Kansas, 1976-1998	17
6.	Incidence Rates of Nonfatal Occupational Injuries and Illnesses By Industry and Selected Case Types, Kansas, 1994-1998	18
7.	Percent Distribution of Nonfatal Occupational Injuries and Illnesses By Industry and Selected Worker Characteristics, Kansas, 1998	33
8.	Number of Nonfatal Occupational Injuries and Illnesses By Industry and Selected Worker Characteristics, Kansas, 1998	34
9.	Number of Nonfatal Occupational Injuries and Illnesses By Industry and Selected Worker Occupations, Kansas, 1998	36
10.	Percent Distribution of Nonfatal Occupational Injuries and Illnesses By Industry and Selected Worker Characteristics, Kansas, 1998	38
11.	Number of Nonfatal Occupational Injuries and Illnesses By Industry and Selected Injury and Illness Characteristics, Kansas, 1998	40
12.	Incidence Rates of Nonfatal Occupational Injuries and Illnesses By Industry and Selected Injury and Illness Characteristics, Kansas, 1998	42
13.	Percent Distribution of Nonfatal Occupational Injuries and Illnesses By Selected Worker Characteristics & Days Away, Kansas, 1998	44

Tables - continued

14.	Percent Distribution of Nonfatal Occupational Injuries and Illnesses By Selected Occupations and Days Away, Kansas, 1998	46
15.	Percent Distribution of Nonfatal Occupational Injuries and Illnesses By Selected Characteristics and Days Away, Kansas, 1998	48
16.	Percent Distribution of Nonfatal Occupational Injuries and Illnesses By Major Industry Division and Days Away, Kansas, 1998	50

Appendices

A.	Scope of Survey and Technical Notes	52
B.	Instructions for Computing Incidence Rates for an Individual Firm	56
C.	Glossary of Terms	58
D.	Record Keeping Guideline Distinctions for Medical Treatment Cases ...	62

Introduction

In April of 1971 the Occupational Safety and Health Act of 1970 became an official part of the national labor laws. The principal objectives are "...to assure so far as possible every working man and woman in the nation safe and healthful working conditions and to preserve human resources."

In response to the Act, the U.S. Department of Labor Bureau of Labor Statistics, was delegated the responsibility of developing and maintaining an effective statistical program to collect, compile, and analyze occupational safety and health data. To help achieve this objective, the Kansas Department of Health and Environment Office of Health Care Information, conducts an annual survey of occupational injuries and illnesses.

The Occupational Safety & Health Act of 1970 requires employers to keep records of work-related injuries or illnesses which result in loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment beyond first aid. A sample of employers are selected each year to participate in the Annual Survey of Occupational Injuries and Illnesses. In Kansas, for 1998, there were 3650 businesses chosen to participate in this survey, they serve as the basis for the estimates in this report. Year to year comparisons of estimated incidence rates indicate basic industry trends and where prevention measures should be either implemented or intensified. The rates contained in this report represent the number of injury and illness cases either per 100 or per 10,000 full-time workers, (injuries are per 100 and illnesses are per 10,000), thus enabling employers to compare the experience of their establishments to the entire industry.

Copies of this report as well as additional information may be obtained by contacting the Kansas Department of Health and Environment, Office of Health Care Information, 900 SW Jackson, Room 1002 N, Topeka, KS, 66612-1290, (785) 296-1058.

The information contained in this report may be obtained electronically by contacting the Kansas Department of Health and Environment, Center for Health and Environmental Statistics, Office of Health Care Information (785-296-5642). This report is also available on the Internet at the KDHE home page on the World Wide Web. The address is: "www.kdhe.state.ks.us/hci". National data on occupational injuries and illnesses is available on the Internet at the Bureau of Labor Statistics' (BLS) home page. That address is: "<http://www.bls.gov>".

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Part One

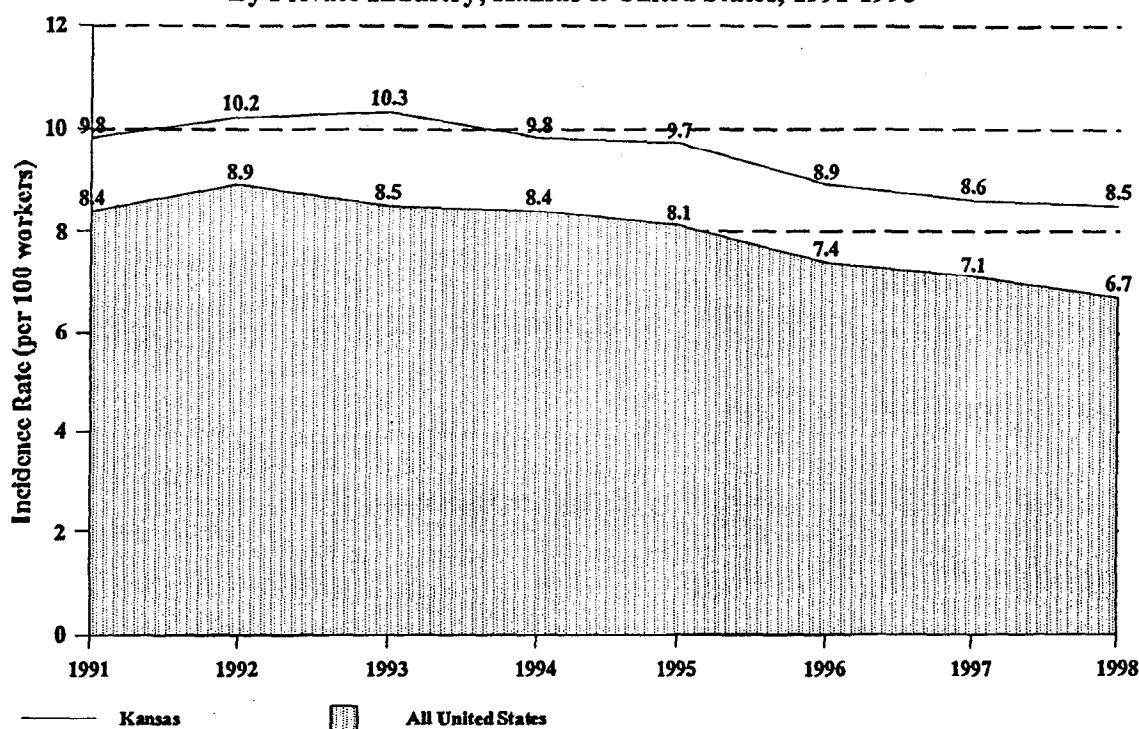
Survey Highlights

SURVEY HIGHLIGHTS

In 1998 there were 1,055,900 persons employed on average in the state of Kansas, placing the state at just over 1% of the nation's workforce of 104,640,700 people. In Kansas, the private industry incidence rate of 8.5 work related injuries or illnesses for every 100 people in the work force was again higher than the U.S. rate of 6.7. Although significantly higher than the national rate, Kansas still experienced a 0.1% decrease from the 1997 incidence rate of 8.6, continuing a downward trend since 1993. (Tables 1, 2, & 3, Charts 1 & 2)

Chart 1. Nonfatal Injury & Illness Incidence Rates

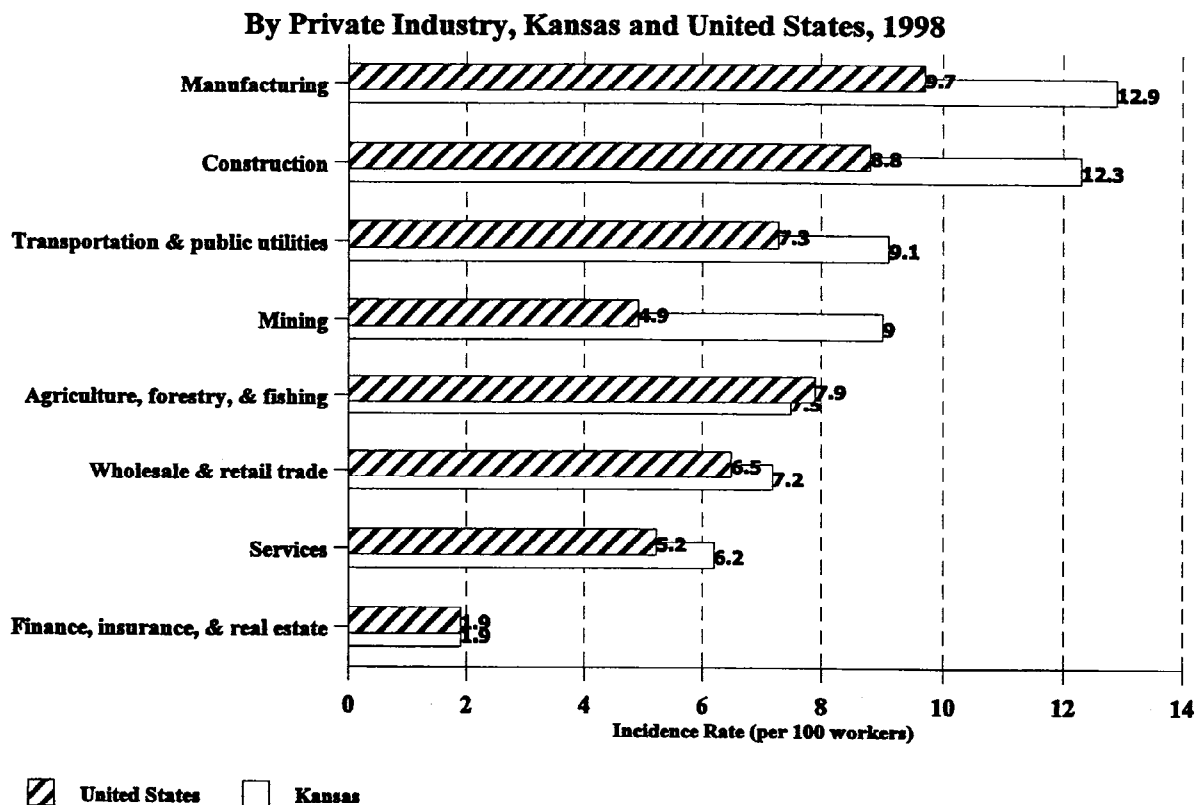
By Private Industry, Kansas & United States, 1991-1998



Of the major industry divisions in the survey, manufacturing, employing 213,100 people in Kansas, had the highest incidence rate. Overall, the manufacturing industry workers suffered 12.9 work related accidents for every 100 people in the work place, a decrease of 9.8% from the previous year's incidence rate of 14.3. The most hazardous subdivision in manufacturing was the primary metal industry, employing 4,300 workers, and experiencing an incidence rate of 21.0. The national incidence rate for primary metal industries was 14.0, with 714,200 employees in this industry nationwide in 1998. Food and kindred products ranked second highest for work related nonfatal injuries and illnesses in the manufacturing industry with an incidence rate of 18.2, employing 32,900 people. It is also interesting to note that food and kindred products had the highest incidence rate for actual lost workday cases, 10.6 of every 100 workers in this industry who were injured on the job resulted in actual time away from work to recover. The United States employed 1,686,700 people in the food and kindred products industry, and experienced an incidence rate 13.6. (Tables 1, 2, & 3, Chart 2)

The construction industry employed 5,949,500 people nationwide in 1998, less than .01% of those workers were in Kansas, which included 61,400 people. Of the construction personnel in Kansas, 12.3 of every 100 workers sustained some kind of recordable injury or illness, placing the industry 8.8% higher than in 1997. (Tables 1, 2 & 3, Chart 2)

Chart 2. Nonfatal Occupational Injury & Illness Incidence Rates



From 1991 to 1996, the mining industry experienced a decrease in incidence rates each year, from 12.6 in 1991 to less than 0.05 in 1996. However, in 1997 the mining industry rate rose to 9.7 injuries or illnesses per 100 employees. In 1998 both the coal mining industry, and the non-metallic, except fuels mining industry were non-publishable, reporting less than 50 cases each that year. These industries combined employed over 7,300 people across the state. (Tables 1, 2, & 3 Charts 1 & 2)

**Table 1. Incidence Rates¹ of Nonfatal Occupational Injuries and Illnesses
By Industry, Kansas, 1991-1998**

INDUSTRY	1991	1992	1993	1994	1995	1996	1997	1998
Ag, forestry, and fishing	12.7	10.6	11.5	11.3	7.1	8.7	12.9	7.5
Mining	12.6	10.8	10.3	9.5	8.8	**	9.7	9.0
Construction	15	14.9	15.4	13.5	11.7	12.2	11.3	12.3
Manufacturing	16.1	17.0	15.7	14.6	14.2	12.5	14.3	12.9
Trans., & public utilities	8.5	9.1	10.9	8.5	9.2	7.1	6.5	9.1
Wholesale & retail trade	8.1	8.6	9.2	8.2	8.8	7.6	6.7	7.2
Finance, Ins., & real est.	1.8	2.8	2.8	2.5	2.8	4.0	2.0	1.9
Services	6.5	7.0	7.3	8.4	8.0	7.9	6.6	6.2

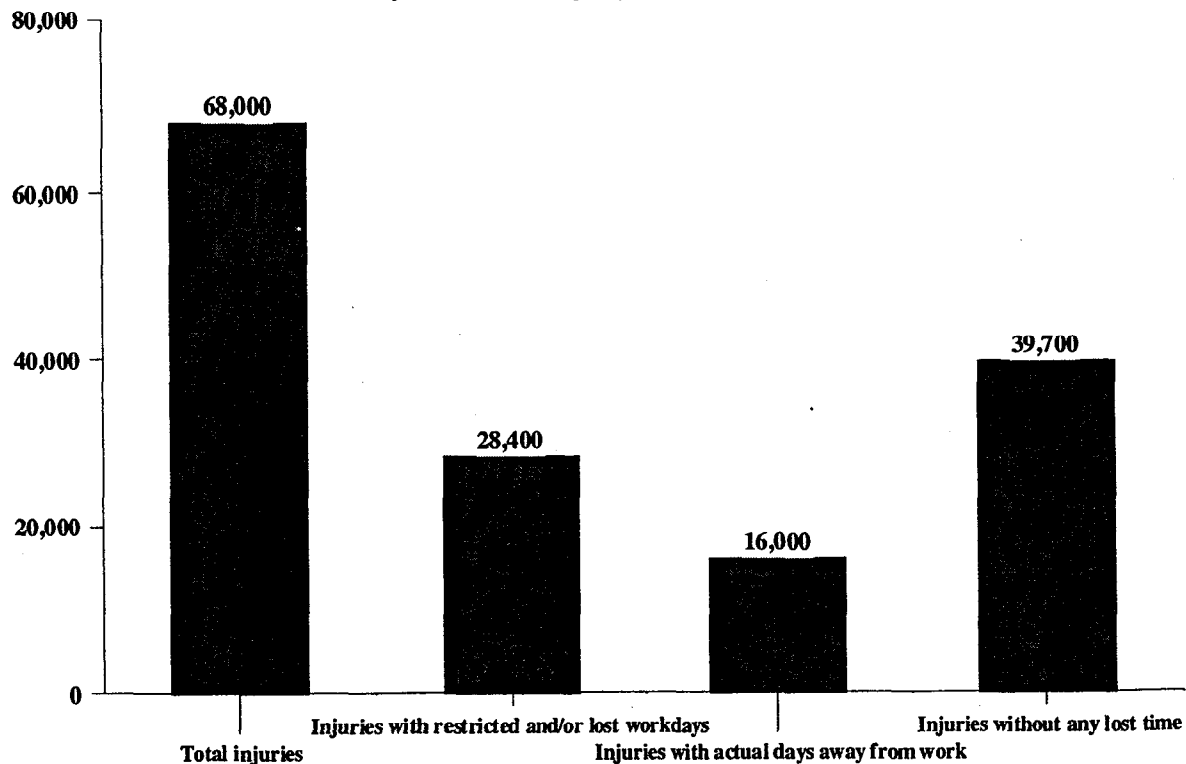
**Incident rate less than .05, not publishable.

¹ Incident rates per 100 full time workers

The industry division of agriculture, forestry, and fishing was the only industry in Kansas in 1998 to have a lower incidence rate than the United States. Dropping from an rate of 12.9 work related incidents per 100 workers in 1997 to 7.5 in 1998, putting the industry 0.05% under the U.S. rate of 7.9 per 100 workers. With 15,200 people employed in this industry in Kansas, 900 cases were reported, making the incidence rate for actual lost work day cases 2.5, also below the U.S. incidence rate of 3.9. (Tables 1, 2, & 3, Chart 2)

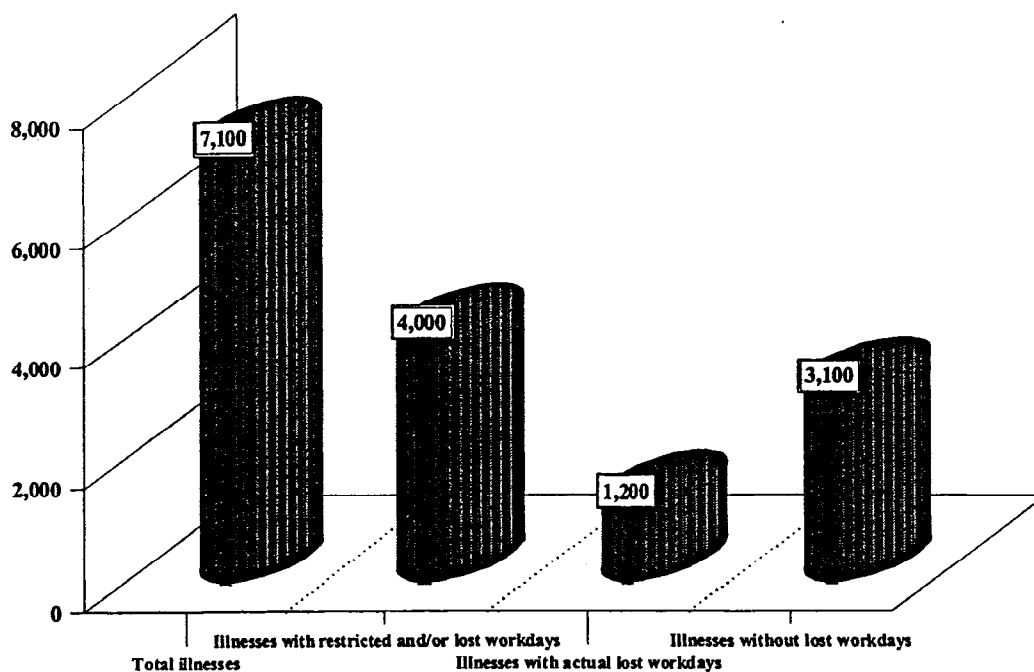
With 67,200 people in the transportation and public utilities industry in Kansas, the industry jumped from a 6.5 incidence rate in 1997 to 9.1 in 1998. It appears the increase was mostly due to the subdivision of trucking and warehousing, employing a third of the industry's workers, or 22,500 people. In 1997, trucking and warehousing had an incidence rate of below 0.05, putting the industry out of range to be published. In 1998, trucking and warehousing had an incidence rate of 11.2 injuries or illnesses for every 100 workers, putting trucking and warehousing 83.6% ahead of the next closest industry subdivision, electric, gas, and sanitary services at 6.1. (Tables 1, 2, & 3, Chart 2)

**Chart 3. Number of Nonfatal Occupational Injuries
By Extent of Injury, Kansas, 1998**

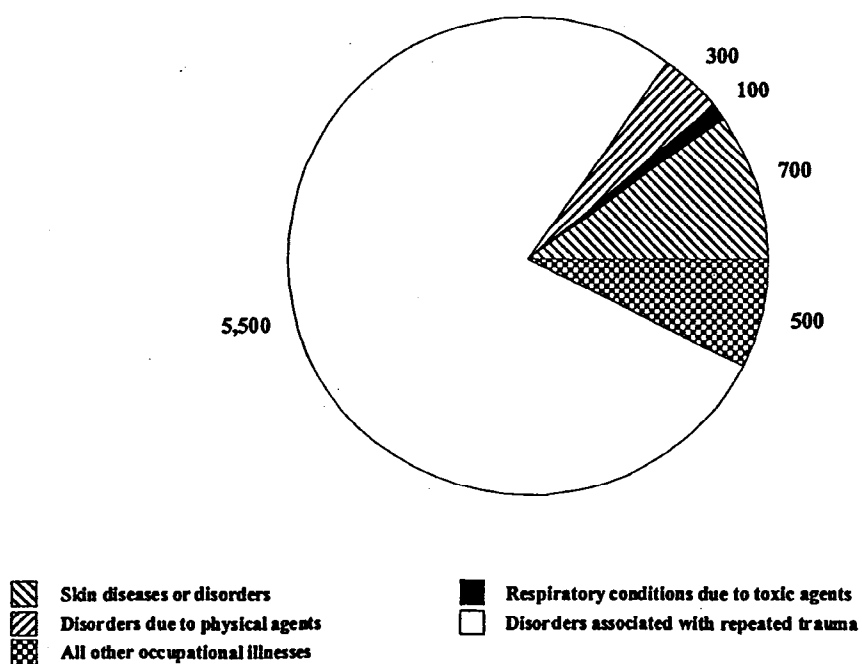


Including lost work day cases and non-lost workday cases, there were 75,100 estimated work related injuries and illnesses across the state. Well over half, 57%, involved only medical treatment, and represented 42,800 of the estimated total cases. Injuries were 90.5% of the total, with 68,000 workers, and a rate of 7.7 injuries for every 100 workers. Illnesses involved 7,100 workers in 1998, the exact same number as the year before. Disorders associated with repeated trauma accounted for 5,500 of the reported cases, or 77.5% of the illness total. (Table 4, Charts 3, 4, & 5)

**Chart 4. Number of Nonfatal Occupational Illnesses
By Extent of Illness, Kansas, 1998**



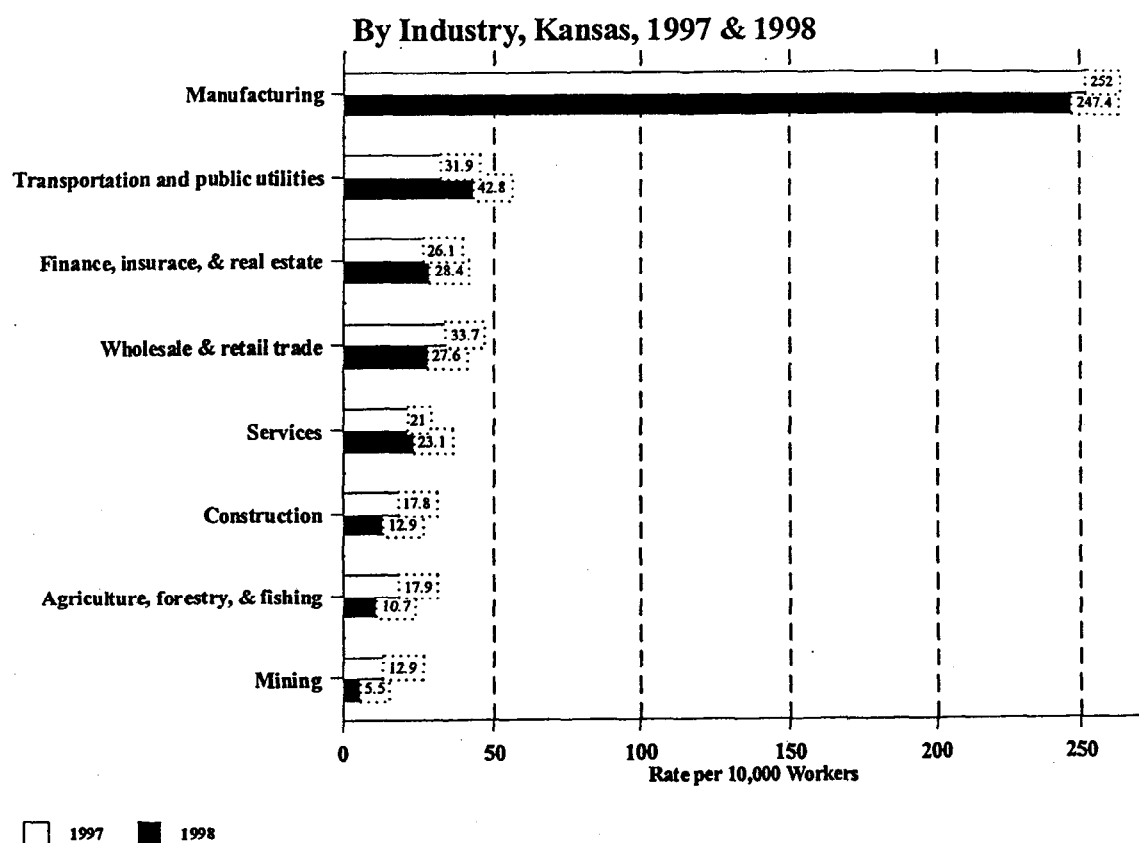
**Chart 5. Number of Nonfatal Occupational Illnesses
By Type of Illness, Kansas, 1998**



In Kansas, 79.9 workers out of every 10,000 contracted some type of illness while working. Disorders associated with repeated trauma was the leading illness in Kansas, with 62.5 of every 10,000 workers afflicted by some disorder due to repeated motion on the job. Skin diseases or disorders affected 7.5 out of 10,000 workers, disorders due to physical agents had an incidence rate of 3.9, and all other occupational illnesses were at 4.2. (Tables 10, 11, & 12, Chart 5)

Although the number of illnesses remained the same from 1997 to 1998, incidence rates dropped in all but 2 industry divisions. Overall in Kansas, there was 1.5% decrease in illness incidence rates, going from 81.1 in 1997 to 79.9 in 1998. (Tables 4 & 5, Chart 6)

Chart 6. Nonfatal Occupational Illness Incidence Rates

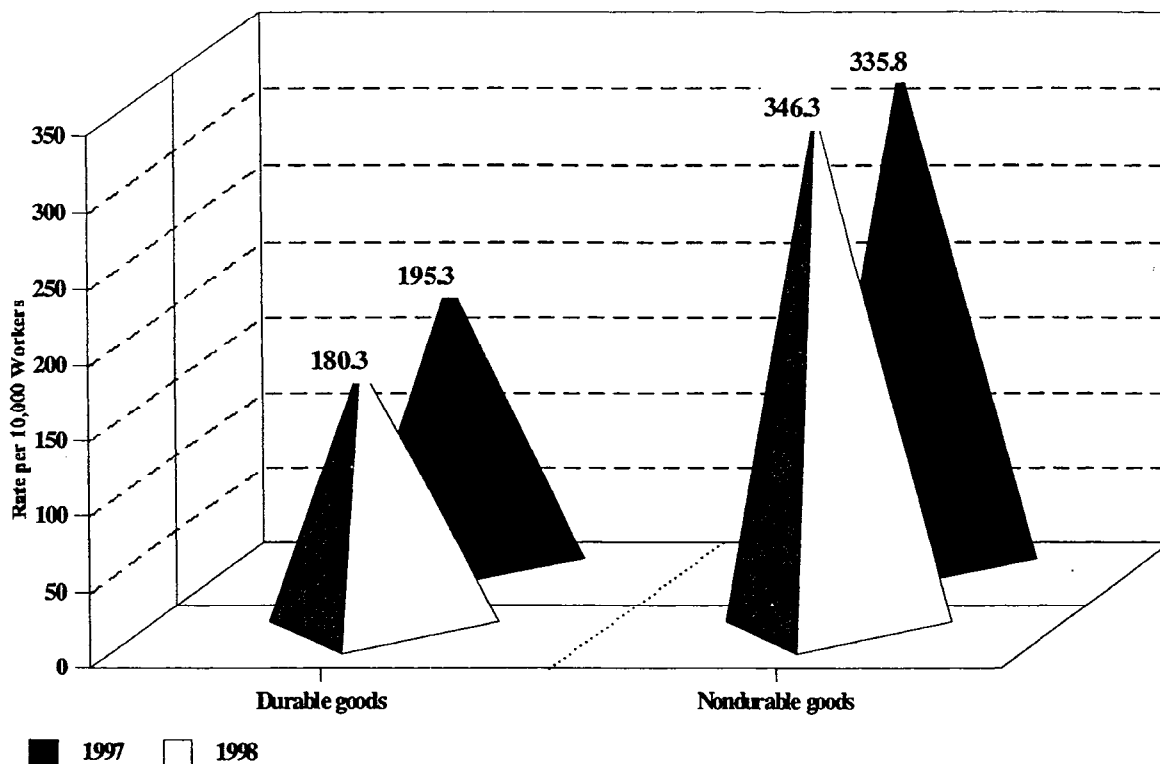


The finance, insurance and real estate industry's illness rate increased 8.8% from the previous year, from 26.1 illnesses per 10,000 workers in 1997 to a 28.4 in 1998. Disorders associated with repeated trauma in this industry increased 11.3%, from 24.7 in 1997 to 27.5 in 1998, both skin diseases or disorders and respiratory conditions due to toxic agents increased in this industry as well. Both categories were non-publishable for this industry in 1997, but in 1998 these categories increased to 0.7 and 0.4 respectively. (Tables 4, 5, & 12, Chart 6)

Transportation and public utilities experienced a 34.2% increase from 1997 to 1998, increasing from 31.9 to 42.8 work related illnesses per 10,000 workers. The electric, gas, and sanitary services subdivision of transportation and public utilities experienced a 32.3 incidence rate in 1998, this subdivision was not publishable the previous year. The national incidence rate for this industry was 26.7 in 1998. (Tables 4, 5, & 12, Chart 6)

Incidence rates decreased the most in the mining industry, dropping 57.4% from 1997 to 1998, from 12.9 illnesses per 10,000 workers to 5.5. The subdivision of oil and gas extraction had the most significant decrease, dropping from 8.7 to 3.5, all illnesses in this subdivision were classified as disorders associated with repeated trauma. The subdivision of nonmetallic minerals, except fuels increased from the previous year. In 1997, the nonmetallic mineral incidence rate was below 0.05, making it non-publishable, however in 1998, it climbed to 13.2 illnesses per 10,000 employees. (Tables 4, 5, & 12, Charts 6 & 7)

Chart 7. Nonfatal Occupational Illness Incidence Rates in Manufacturing
By Division of Industry, Kansas, 1997 & 1998



The second largest drop from the previous year was in the agriculture, forestry, and fishing industry, dropping 40% from the previous year. With an incidence rate of 10.7 in 1998, all illnesses fell into the skin diseases category. In 1997, the illnesses were divided up among skin diseases and all other illnesses, with an overall rate of 17.9. (Tables 4, 5, & 12, Charts 6 & 7)

Manufacturing continued to be Kansas' most hazardous industry, even with a slight decrease from 252.0 in 1997 to 247.4 occupational illnesses per 10,000 workers in 1998. The nondurable goods division of manufacturing experienced an incidence rate of 346.3 per 10,000 workers, with the food and kindred products subdivision rate at 609.6. In the durable goods division, the primary metal industry subdivision saw an incidence rate of 281.8 illnesses per 10,000 employees. Overall, the durable goods division had an incidence rate of 180.3. (Tables 4, 5, & 12, Charts 6 & 7)

Part One

Tables

**Table 2. Number of Nonfatal Occupational Injuries and Illnesses
By Industry and Selected Case Types, Kansas, 1998**

Industry ¹	SIC code ²	1998 Annual average employ- ment ³ (000's)	Injuries and Illnesses				Injuries			
			Total Cases	Lost workday cases		Cases without lost work- days	Total cases	Lost workday cases		Cases without lost work- days
				Total ⁴	With days away from work ⁵			Total ⁴	With days away from work ⁵	
Private Industry ⁶		1,055.9	75.1	32.3	17.2	42.8	68.0	28.4	16.0	39.7
Agriculture, forestry, and fishing ⁶		15.2	0.9	0.3	0.2	0.6	0.9	0.3	0.2	0.6
Mining ⁷		7.3	0.7	0.3	0.2	0.4	0.7	0.3	0.2	0.4
Coal mining ⁷	12	0.1	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)
Oil and gas extraction	13	6.0	0.6	0.2	0.1	0.4	0.6	0.2	0.1	0.4
Nonmetallic minerals, except fuels ⁷	14	1.3	0.1	(⁸)	(⁸)	(⁸)	0.1	(⁸)	(⁸)	(⁸)
Construction		61.4	6.9	3.2	2.3	3.7	6.8	3.1	2.2	3.7
General building contractors	15	14.2	2.0	0.8	0.6	1.1	2.0	0.8	0.6	1.1
Special trade contractors	17	36.6	4.1	1.8	1.4	2.3	4.1	1.8	1.3	2.3
Manufacturing		213.1	27.8	14.0	4.5	13.8	22.5	10.6	3.7	11.8
<u>Durable goods</u>		127.4	16.4	7.5	2.4	8.9	14.1	6.1	1.9	8.0
Lumber and wood products	24	5.4	0.8	0.4	0.2	0.4	0.7	0.3	0.2	0.4
Primary metal industries	33	4.3	0.9	0.3	0.2	0.6	0.8	0.2	0.1	0.6
Fabricated metal products	34	11.2	1.5	0.6	0.3	0.9	1.4	0.6	0.2	0.8
Industrial machinery and equip.	35	24.3	3.5	1.3	0.6	2.2	3.2	1.2	0.5	2.0
Electronic and other electric equip.	36	8.9	0.7	0.3	0.1	0.5	0.6	0.2	0.1	0.4
Transportation equipment	37	59.6	7.3	4.2	0.9	3.1	5.8	3.2	0.7	2.6
<u>Nondurable goods</u>		85.7	11.4	6.5	2.1	4.9	8.4	4.6	1.8	3.8
Food and kindred products	20	32.9	6.5	3.7	0.8	2.7	4.3	2.4	0.6	1.9
Paper and allied products	26	5.2	0.3	0.2	0.1	0.2	0.3	0.2	0.1	0.2
Printing and publishing	27	23.0	1.5	0.8	0.4	0.8	1.3	0.6	0.4	0.7
Chemicals and allied products	28	6.8	0.6	0.3	0.2	0.3	0.6	0.3	0.2	0.3
Rubber and misc. plastic products	30	12.3	2.0	1.3	0.4	0.8	1.5	0.8	0.4	0.7
Transportation and public utilities ⁷		67.2	6.5	2.6	2.0	3.8	6.2	2.5	1.9	3.6
Railroad transportation ⁷	40	—	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1
Trucking and warehousing	42	22.5	2.7	0.6	0.5	2.1	2.7	0.6	0.5	2.1
Electric, gas, and sanitary services	49	9.9	0.6	0.2	0.1	0.4	0.6	0.2	0.1	0.4
Wholesale and retail trade		318.6	17.3	6.8	4.8	10.5	16.7	6.5	4.7	10.2
<u>Wholesale trade</u>		77.2	5.5	2.5	1.9	3.0	5.3	2.4	1.9	2.9
Wholesale trade - durable goods	50	40.7	2.9	0.9	0.6	2.0	2.8	0.9	0.5	2.0
Wholesale trade - nondurable gds	51	36.5	2.6	1.6	1.4	1.0	2.5	1.6	1.3	1.0
<u>Retail trade</u>		241.4	11.8	4.3	2.9	7.5	11.3	4.1	2.8	7.3
Building materials and garden sply	52	10.6	1.1	0.4	0.2	0.8	1.1	0.4	0.2	0.8
General merchandise stores	53	34.2	1.8	0.9	0.4	0.8	1.7	0.9	0.4	0.8
Food stores	54	35.0	1.8	0.6	0.5	1.3	1.8	0.5	0.4	1.3
Auto dealers and service stations	55	26.8	2.0	0.7	0.5	1.3	1.9	0.7	0.4	1.3
Apparel and accessory stores	56	11.9	0.5	0.3	0.1	0.2	0.4	0.3	0.1	0.1
Furniture and home furnishings	57	10.8	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1
Eating and drinking places	58	85.1	3.9	1.1	1.0	2.9	3.7	1.0	1.0	2.7
Miscellaneous retail	59	27.1	0.4	0.2	0.2	0.2	0.4	0.2	0.1	0.2

**Table 2. Number of Nonfatal Occupational Injuries and Illnesses
By Industry and Selected Case Types, Kansas, 1998, continued**

Industry ¹	SIC code ²	1998 Annual average employ- ment ³ (000's)	Injuries and Illnesses				Injuries			
			Total Cases	Lost workday cases		Cases without lost work- days	Total cases	Lost workday cases		Cases without lost work- days
				Total ⁵	With days away from work ⁶			Total ⁵	With days away from work ⁶	
Finance, insurance, and real estate		62.0	1.0	0.3	0.2	0.7	0.9	0.3	0.2	0.6
Real estate	65	10.8	0.4	0.1	0.1	0.2	0.4	0.1	0.1	0.2
Services		311.1	14.0	4.9	3.0	9.1	13.5	4.7	2.9	8.7
Hotels and other lodging places	70	10.9	0.3	0.2	0.1	0.2	0.3	0.2	0.1	0.2
Personal services	72	12.3	0.3	0.1	(⁷)	0.2	0.3	0.1	(⁷)	0.2
Auto repair, services, and parking	75	9.9	0.3	0.1	0.1	0.2	0.3	0.1	0.1	0.2
Misc. repair services	76	5.2	0.3	0.1	0.1	0.2	0.3	0.1	0.1	0.2
Amusement & recreation services	79	13.5	0.3	0.1	0.1	0.2	0.3	0.1	0.1	0.2
Health services	80	105.0	7.5	2.9	1.6	4.6	7.3	2.8	1.6	4.4
Educational services	82	7.9	0.3	(⁷)	(⁷)	0.2	0.2	(⁷)	(⁷)	0.2
Membership organizations	86	8.6	0.2	(⁷)	(⁷)	0.1	0.2	(⁷)	(⁷)	0.1
Engineering & management serv.	87	29.1	0.6	0.2	0.1	0.4	0.5	0.2	0.1	0.3

¹ Totals include data for industries not shown separately.

² Standard Industrial Classification manual, 1987 Edition

³ Employment is expressed as an annual average and is derived primarily

From the BLS-State Covered Employment and Wages program. Employment

in private households (SIC 88) is excluded.

⁴ Total lost workday cases involve days away from work, or days of restricted activity, or both.

⁵ Days-away-from-work cases include those which result in days away from

work with or without restricted work activity.

⁶ Excludes farms with fewer than 11 employees.

⁷ Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and for employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of Transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal mining industries.

⁸ Fewer than 50 cases

n.e.c. = not elsewhere classified.

---- = Indicates data not available.

NOTE: Because of rounding, components may not add to totals.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses, in cooperation with participating State agencies.

**Table 3. Incidence Rates ¹ of Nonfatal Injuries and Illnesses
By Industry and Selected Case Types, Kansas, 1998**

Industry ²	SIC code ³	1998 Annual average employ- ment ⁴ (000's)	Injuries and Illnesses				Injuries			
			Total Cases	Lost workday cases		Cases without lost work- days	Total cases	Lost workday cases		Cases without lost work- days
				Total ⁵	With days away from work ⁶			Total ⁵	With days away from work ⁶	
Private Industry ⁷		1,055.9	8.5	3.7	1.9	4.8	7.7	3.2	1.8	4.5
Agriculture, forestry, and fishing ⁷		15.2	7.5	2.5	2.0	5.0	7.4	2.5	2.0	4.9
Mining ⁸		7.3	9.0	3.7	2.5	5.3	9.0	3.7	2.4	5.3
Coal mining ⁸	12	0.1	4.4	4.4	4.4	(*)	4.4	4.4	4.4	(*)
Oil and gas extraction	13	6.0	10.3	4.0	2.5	6.3	10.2	4.0	2.5	6.3
Nonmetallic minerals, except fuels ⁸	14	1.3	4.5	2.6	2.4	1.9	4.4	2.5	2.2	1.9
Construction		61.4	12.3	5.7	4.1	6.7	12.2	5.6	4.0	6.6
General building contractors	15	14.2	15.4	6.5	4.9	8.8	15.3	6.5	4.9	8.8
Special trade contractors	17	36.6	12.7	5.6	4.2	7.1	12.6	5.5	4.2	7.1
Manufacturing		213.1	12.9	6.5	2.1	6.4	10.4	4.9	1.7	5.5
<u>Durable goods</u>		127.4	12.8	5.8	1.9	7.0	11.0	4.7	1.5	6.2
Lumber and wood products	24	5.4	15.1	7.0	4.0	8.1	13.8	6.0	3.3	7.8
Primary metal industries	33	4.3	21.0	6.3	3.6	14.7	18.2	4.8	2.3	13.4
Fabricated metal products	34	11.2	13.0	5.3	2.5	7.7	12.0	4.7	2.0	7.2
Industrial machinery and equip.	35	24.3	13.8	5.1	2.2	8.8	12.6	4.6	1.9	8.1
Electronic and other electric equip.	36	8.9	7.5	2.6	1.2	4.9	6.1	2.1	1.0	4.0
Transportation equipment	37	59.6	12.5	7.2	1.5	5.3	10.0	5.5	1.2	4.5
<u>Nondurable goods</u>		85.7	13.1	7.5	2.4	5.6	9.6	5.2	2.0	4.4
Food and kindred products	20	32.9	18.2	10.6	2.3	7.7	12.1	6.8	1.8	5.3
Paper and allied products	26	5.2	6.5	3.0	1.3	3.5	6.1	2.9	1.2	3.1
Printing and publishing	27	23.0	7.2	3.7	2.0	3.5	6.2	3.0	1.8	3.2
Chemicals and allied products	28	6.8	8.4	4.5	3.5	3.9	8.1	4.4	3.4	3.7
Rubber and misc. plastic products	30	12.3	16.0	9.9	3.4	6.2	11.9	6.5	2.8	5.4
Transportation and public utilities ⁸		67.2	9.1	3.7	2.7	5.4	8.6	3.5	2.6	5.1
Railroad transportation ⁸	40	—	2.5	1.5	1.1	0.9	2.4	1.5	1.1	0.9
Trucking and warehousing	42	22.5	11.2	2.5	2.1	8.6	11.2	2.5	2.1	8.6
Electric, gas, and sanitary services	49	9.9	6.1	2.4	1.0	3.7	5.8	2.3	1.0	3.5
Wholesale and retail trade		318.6	7.2	2.8	2.0	4.4	6.9	2.7	1.9	4.2
<u>Wholesale trade</u>		77.2	7.7	3.5	2.7	4.2	7.4	3.4	2.6	4.0
Wholesale trade - durable goods	50	40.7	7.5	2.3	1.5	5.2	7.2	2.2	1.4	5.0
Wholesale trade - nondurable goods	51	36.5	7.8	4.8	4.1	3.0	7.6	4.7	4.0	2.9
<u>Retail trade</u>		241.4	7.0	2.5	1.7	4.5	6.7	2.4	1.6	4.3
Building materials and garden supplies	52	10.6	12.7	4.0	2.5	8.7	12.6	4.0	2.5	8.6
General merchandise stores	53	34.2	8.2	4.4	1.8	3.8	8.0	4.2	1.8	3.8
Food stores	54	35.0	7.2	2.2	1.8	5.0	7.1	2.2	1.7	5.0
Auto dealers and service stations	55	26.8	7.7	2.7	1.9	5.0	7.6	2.6	1.8	5.0
Apparel and accessory stores	56	11.9	5.9	3.9	0.9	2.0	4.4	3.1	0.8	1.3
Furniture and home furnishings	57	10.8	2.8	1.7	1.1	1.1	2.8	1.7	1.1	1.1
Eating and drinking places	58	85.1	7.6	2.0	2.0	5.6	7.2	2.0	1.9	5.3
Miscellaneous retail	59	27.1	2.4	1.2	0.9	1.2	2.1	0.9	0.7	1.2

**Table 3. Incidence Rates ¹ of Nonfatal Injuries and Illnesses
By Industry and Selected Case Types, Kansas, 1998, continued**

Industry ²	SIC code ³	1998 Annual average employ- ment ⁴ (000's)	Injuries and Illnesses				Injuries			
			Total Cases	Lost workday cases		Cases without lost work- days	Total cases	Lost workday cases		Cases without lost work- days
				Total ⁵	With days away from work ⁶			Total ⁵	With days away from work ⁶	
Finance, insurance, and real estate		62.0	1.9	0.6	0.4	1.3	1.6	0.5	0.3	1.1
Real estate	65	10.8	4.2	1.4	1.0	2.8	4.1	1.4	0.9	2.7
Services		311.1	6.2	2.2	1.3	4.0	5.9	2.1	1.3	3.9
Hotels and other lodging places	70	10.9	4.6	2.2	1.4	2.4	4.6	2.2	1.4	2.4
Personal services	72	12.3	3.7	1.1	0.5	2.6	3.2	1.1	0.5	2.1
Auto repair, services, and parking	75	9.9	3.4	1.6	1.3	1.8	3.3	1.5	1.2	1.8
Misc. repair services	76	5.2	6.9	2.6	1.9	4.3	6.8	2.5	1.8	4.3
Amusement & recreation services	79	13.5	5.1	1.7	1.0	3.4	4.8	1.6	0.9	3.3
Health services	80	105.0	9.5	3.6	2.1	5.8	9.2	3.6	2.0	5.6
Educational services	82	7.9	4.0	0.5	0.3	3.6	3.2	0.4	0.3	2.8
Membership organizations	86	8.6	3.3	0.6	0.2	2.7	3.1	0.6	0.2	2.6
Engineering & management serv.	87	29.1	2.0	0.7	0.5	1.3	1.9	0.7	0.5	1.2

¹ Incident rates represent the number of injuries and illnesses per 100 full-time workers and were calculated as: (N/EH) x 200,000 where

N = number of injuries and illnesses
EH = total hours worked by all employees during calendar year
200,000 = base for 100 equivalent full-time workers (Working 40 hours a week, 50 weeks year).

² Totals include data for industries not shown separately.

³ *Standard Industrial Classification Manual*, 1987 Edition

⁴ Employment is expressed as an annual average and is derived primarily from The BLS-State Covered Employment and Wages program. Employment in Private households (SIC 88) is excluded.

⁵ Total lost workday cases involve days away from work, or days of restricted work activity, or both.

⁶ Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

⁷ Excludes farms with fewer than 11 employees.

⁸ Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and for employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of Transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal mining industries.

⁹ Incidence rate less than 0.05.

NOTE: Because of rounding, components may not add to totals.

n.e.c. = not elsewhere classified.

---- = Indicates data not available.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses, in cooperation with participating State agencies.

**Table 4. Incidence Rates ¹ of Nonfatal Injuries and Illnesses
By Industry, Kansas & U.S., 1997 & 1998**

Industry division ²	Total cases				Total lost workday cases ³				Cases without lost workdays			
	U.S.		Kansas		U.S.		Kansas		U.S.		Kansas	
	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998
Private Industry⁴	7.1	6.7	8.6	8.5	3.3	3.1	4.0	3.7	3.8	3.5	4.6	4.8
Agriculture, forestry, & fishing⁴	8.4	7.9	12.9	7.5	4.1	3.9	6.7	2.5	4.2	4.0	6.2	5.0
Mining⁵	5.9	4.9	9.7	9.0	3.7	2.9	6.2	3.7	2.1	2.0	3.5	5.3
Construction	9.5	8.8	11.3	12.3	4.4	4.0	5.3	5.7	5.0	4.8	6.1	6.7
Manufacturing	10.3	9.7	14.3	12.9	4.8	4.7	6.8	6.5	5.4	5.0	7.5	6.4
Durable goods	11.3	10.7	14.0	12.8	5.1	5.0	6.2	5.8	6.2	5.7	7.9	7.0
Nondurable goods	8.8	8.2	14.7	13.1	4.4	4.3	7.8	7.5	4.3	3.9	6.9	5.6
Transportation & public utilities⁵	8.2	7.3	6.5	9.1	4.8	4.3	3.7	3.7	3.4	3.0	2.8	5.4
Wholesale and retail trade	6.7	6.5	6.7	7.2	3.0	2.8	2.9	2.8	3.7	3.6	3.8	4.4
Wholesale trade	6.5	6.5	6.7	7.7	3.2	3.3	3.2	3.5	3.3	3.2	3.6	4.2
Retail trade	6.8	6.5	6.6	7.0	2.9	2.7	2.8	2.5	3.9	3.8	3.9	4.5
Finance, insurance, & real estate	2.2	1.9	2.0	1.9	0.9	0.7	0.8	0.6	1.4	1.2	1.1	1.3
Services	5.6	5.2	6.6	6.2	2.5	2.4	3.0	2.2	3.1	2.9	3.7	4.0

¹ Incidence rates represent the number of injuries and illnesses per 100 full-time workers and were calculated as: (N/EH) x 200,000 where

N = number of injuries and illnesses
 EH = total hours worked by all employees during calendar year
 200,000 = base for 100 equivalent full-time workers (Working 40 hours a week, 50 weeks year).

² Totals include data for industries not shown separately.

³ Total lost workday cases involve days away from work, or days of restricted work activity, or both.

⁴ Excludes farms with fewer than 11 employees.

⁵ Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and for employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of Transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal mining industries.

NOTE: Because of rounding, components may not add to totals.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses, in cooperation with participating State agencies.

**Table 5. Incidence Rates¹ of Nonfatal Occupational Injuries & Illnesses
By Selected Case Types, Kansas, 1976 - 1998**

Year	Injuries & Illnesses				Injuries			
	Total cases	Lost workday cases		Cases without lost workdays	Total cases	Lost workday cases		Cases without lost workdays
		Total ²	With days away from work ³			Total ²	With days away from work ³	
1976	8.4	3.3	3.1	5.2	8.1	3.1	3.0	5.0
1977	8.5	3.5	3.3	5.0	8.1	3.3	3.2	4.8
1978 ⁴	8.8	3.8	3.5	5.0	8.5	3.7	3.5	4.8
1979 ⁴	8.6	4.0	3.6	4.7	8.4	3.8	3.5	4.5
1980	8.1	3.6	3.3	4.5	7.9	3.5	3.2	4.4
1981	8.4	3.7	3.3	4.7	8.1	3.6	3.3	4.5
1982	7.5	3.1	2.8	4.3	7.2	3.0	2.7	4.2
1983 ⁴	7.5	3.3	2.9	4.3	7.3	3.1	2.8	4.1
1984 ⁴	7.7	3.4	3.0	4.2	7.4	3.3	2.9	4.1
1985	7.7	3.4	3.0	4.3	7.5	3.3	2.9	4.2
1986	7.6	3.3	2.9	4.3	7.3	3.1	2.8	4.1
1987	8.6	3.8	3.1	4.8	8.2	3.6	3.0	4.6
1988	9.5	4.0	3.2	5.5	9.0	3.8	3.1	5.2
1989	10.0	4.3	3.4	5.7	9.4	4.1	3.2	5.3
1990	9.9	4.2	3.3	5.7	9.1	3.8	3.1	5.2
1991	9.8	4.3	3.3	5.5	8.9	3.9	3.1	5.0
1992 ⁵	10.2	4.3	3.1	5.9	9.1	3.8	2.8	5.3
1993 ⁵	10.3	4.3	3.0	6.0	9.3	3.9	2.8	5.4
1994 ⁵	9.8	4.2	2.7	5.6	8.9	3.7	2.5	5.2
1995 ⁵	9.7	4.2	2.5	5.5	8.8	3.7	2.3	5.0
1996 ⁵	8.9	4.0	2.2	4.9	8.2	3.6	2.1	4.6
1997 ⁵	8.6	4.0	2.1	4.6	7.8	3.6	2.0	4.2
1998 ⁵	8.5	3.7	1.9	4.8	7.7	3.2	1.8	4.5

¹ Incidence rates represent the number of injuries and illnesses per 100

full-time workers and were calculated as: (N/EH) x 200,000 where

N = number of injuries and illnesses

EH = total hours worked by all employees during calendar year

200,000 = base for 100 equivalent full-time workers (Working 40 hours a week, 50 weeks year).

² Total lost workday cases involve days away from work, or days of restricted work activity, or both.

³ Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

⁴ To maintain historical comparability with the rest of the series, data for small non-farm employers

in low risk industries who were not surveyed were imputed and included in survey estimates.

⁵ Data exclude fatal work-related injuries and illnesses

NOTE: Data for 1976-1987 are based on the *Standard Industrial Classification Manual*, 1972 Edition;

data for years 1988-1998 are based on the 1987 Edition of the same manual.

NOTE: Because of rounding, components may not add to totals. Data excludes farms with fewer than 11 employees.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses, in cooperation with participating State agencies.

**Table 6. Incidence Rates ¹ of Nonfatal Injuries & Illnesses
By Industry and Selected Case Types, Kansas, 1994 - 1998**

Industry division	Total cases					Lost workday cases										Cases without lost workdays				
						Total ²					With days away from work ³									
	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
Private industry ⁴	9.8	9.7	8.9	8.6	8.5	4.2	4.2	4.0	4.0	3.7	2.7	2.5	2.2	2.1	1.9	5.6	5.5	4.9	4.6	4.8
Agriculture, forestry, & fishing ⁴	11.3	7.1	8.7	12.9	7.5	4.7	3.8	3.0	6.7	5.5	3.9	3.2	2.8	5.3	2.0	6.6	3.3	5.7	6.2	5.0
Mining ⁵	9.5	8.8	-----	9.7	9.0	5.9	4.6	-----	6.2	3.7	5.4	4.1	-----	4.7	2.5	3.6	4.2	-----	3.5	5.3
Construction	13.5	11.7	12.2	11.3	12.3	6.1	4.7	5.8	5.3	5.7	5.3	3.7	4.7	4.0	4.1	7.4	7.0	6.3	3.1	6.7
Manufacturing	14.6	14.2	12.5	14.3	12.9	6.7	6.7	5.8	6.8	6.5	3.1	2.9	2.3	2.5	2.1	7.9	7.5	6.7	7.5	6.4
Durable goods	13.9	12.6	12.4	14.0	12.8	5.4	5.0	5.2	6.2	5.8	3.1	2.6	2.4	2.3	1.9	8.5	7.6	7.1	7.9	7.0
Nondurable goods	15.5	16.4	12.7	14.7	13.1	8.2	8.9	6.6	7.8	7.5	3.1	3.3	2.2	2.8	2.4	7.2	7.5	6.1	6.9	5.6
Transportation & public utilities ⁵	8.5	9.2	7.1	6.5	9.1	5.0	4.8	3.6	3.7	3.7	3.5	2.9	2.2	2.5	2.7	3.6	4.3	3.6	2.8	5.4
Wholesale & retail trade	8.2	8.8	7.6	6.7	7.2	3.0	3.6	3.5	2.9	2.8	2.3	2.4	2.0	1.6	2.0	5.2	5.2	4.2	3.8	4.4
Wholesale trade	9.1	8.5	7.3	6.7	7.7	3.7	3.6	3.6	3.2	3.5	2.7	2.4	1.7	2.0	2.7	5.4	4.8	3.8	3.6	4.2
Retail trade	7.8	8.9	7.8	6.6	7.0	2.7	3.5	3.4	2.8	2.5	2.2	2.3	2.1	1.3	1.7	5.1	5.4	4.3	3.9	4.5
Finance, ins., & real estate	2.5	2.8	4.0	2.0	1.9	1.0	1.2	1.1	0.8	0.6	0.7	0.7	0.9	0.7	0.4	1.5	1.6	2.8	1.1	1.3
Services	8.4	8.0	7.9	6.6	6.2	3.1	3.1	3.2	3.0	2.2	2.2	2.1	2.0	1.9	1.3	5.4	4.9	4.8	3.7	4.0

¹ The incidence rates represent the number of injuries and/or illnesses per 100 full-time equivalent employees and were calculated as: $(N/EH) \times 200,000$, where:
N = number of injuries and/or illnesses
EH = total hours worked by all employees during the calendar year
200,000 = base for 100 full-time workers (working 40 hours a week, 50 weeks a year).

² Total includes cases involving restricted work activity only in addition to days-away-from-work cases with or without restricted activity.

³ Days away-from-work cases include those which result in days away from work with or without restricted activity.

⁴ Excludes farms with fewer than 11 employees

⁵ Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal mining operations.

NOTE: Because of rounding, components may not add to the totals.

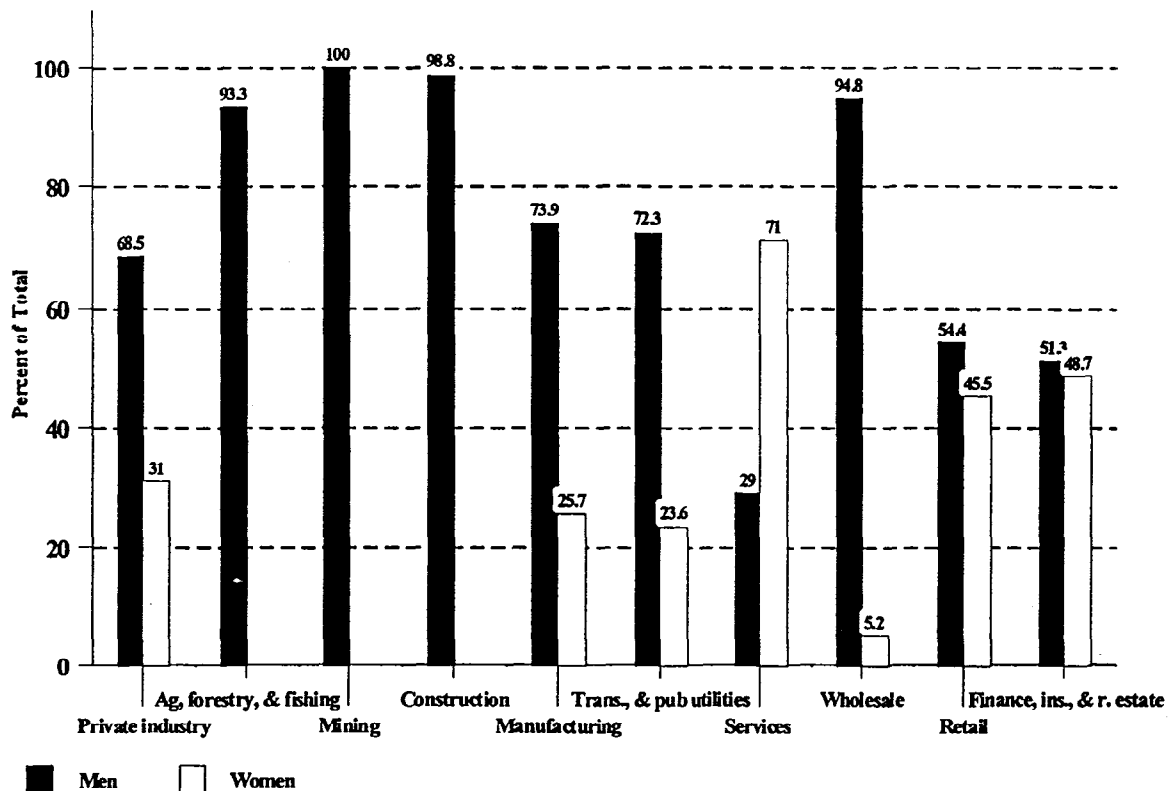
Source: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with participating state agencies.

Part II

Case Characteristics

Kansas and the United States fared about the same in the percent distribution of injuries and illnesses by sex of the worker in 1998. Out of the 17,247 people that were either injured or contracted an illness while working in Kansas, almost 1/3 of them were women, accounting for 5,341 of the total cases, or 31%. This compares to 33% of the women nationally, or 571,341 of the 1,730,534 reported cases nationwide. Men incurred 1,147,388 injuries and illness nationwide, or 66.30%, and 11,811 in Kansas, for 68.5% of the state total. (Tables 7 & 8, Chart 8)

Chart 8. Nonfatal Occupational Injuries & Illnesses
By Sex & Industry, Kansas, 1998



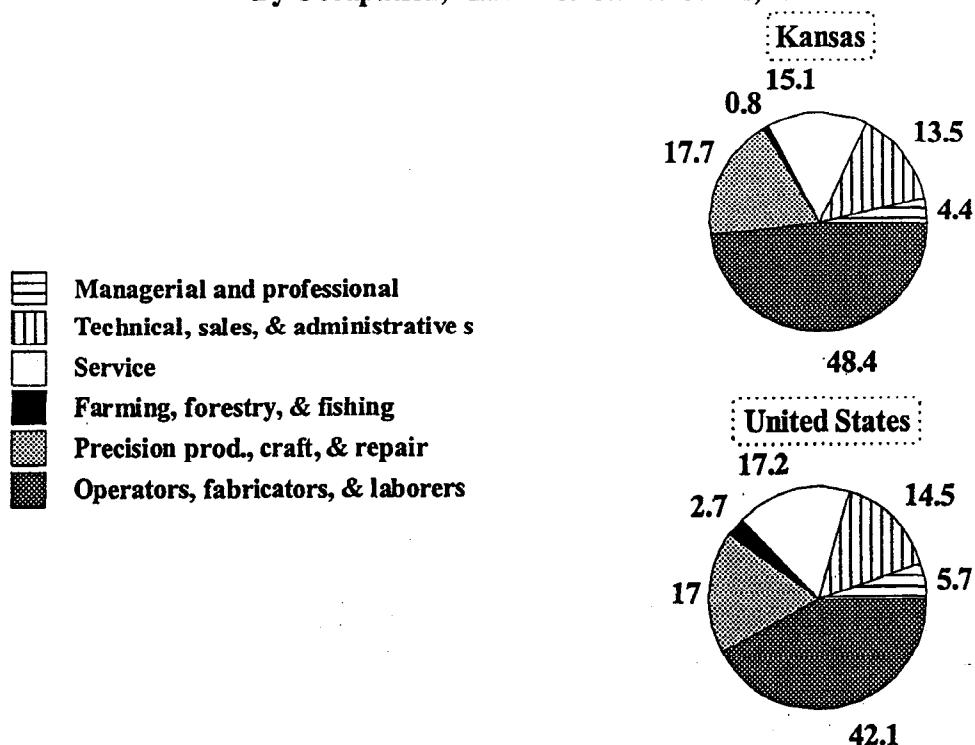
The only industry where women comprised the majority of the work related ailments was the services industry. In the services industry women comprised 71% of the total injuries and illnesses for Kansas, or 2,134 reported cases. This compares to a national percentage of 61.2%, or 245,438 reported cases nationwide. Men were responsible for the remaining 29.0% in Kansas with 874 injuries and work related illnesses in this industry, compared to 38.4%, or 154,135 reported cases across the nation. (Tables 7 & 8, Chart 8)

In the 3 industry divisions of agriculture, forestry and fishing, mining, and construction across Kansas, injuries to women were infrequent in 1998. In the agriculture, forestry, and fishing industry 93.3%, or 230, of the injuries and illnesses occurred to men. In the mining and construction industries the percentages were similar, with 100%, and 98.8% respectively. (Tables 7 & 8, Chart 8)

The operators, fabricators, and laborers occupational category, included 48.4%, or 8,340, of all reported injuries and illnesses in Kansas for 1998. Nationwide, this occupational division also represented the majority, but with only 42.1%, or 729,025 of the injuries and illnesses. The industry of transportation and public utilities had the most operators, fabricators, and laborers hurt while on the job across the state with 78%, or 1,531 workers injured during the year. (Tables 9 & 14, Chart 9)

Chart 9. Percent Distribution of Nonfatal Injuries and Illnesses

By Occupation, Kansas & United States, 1998

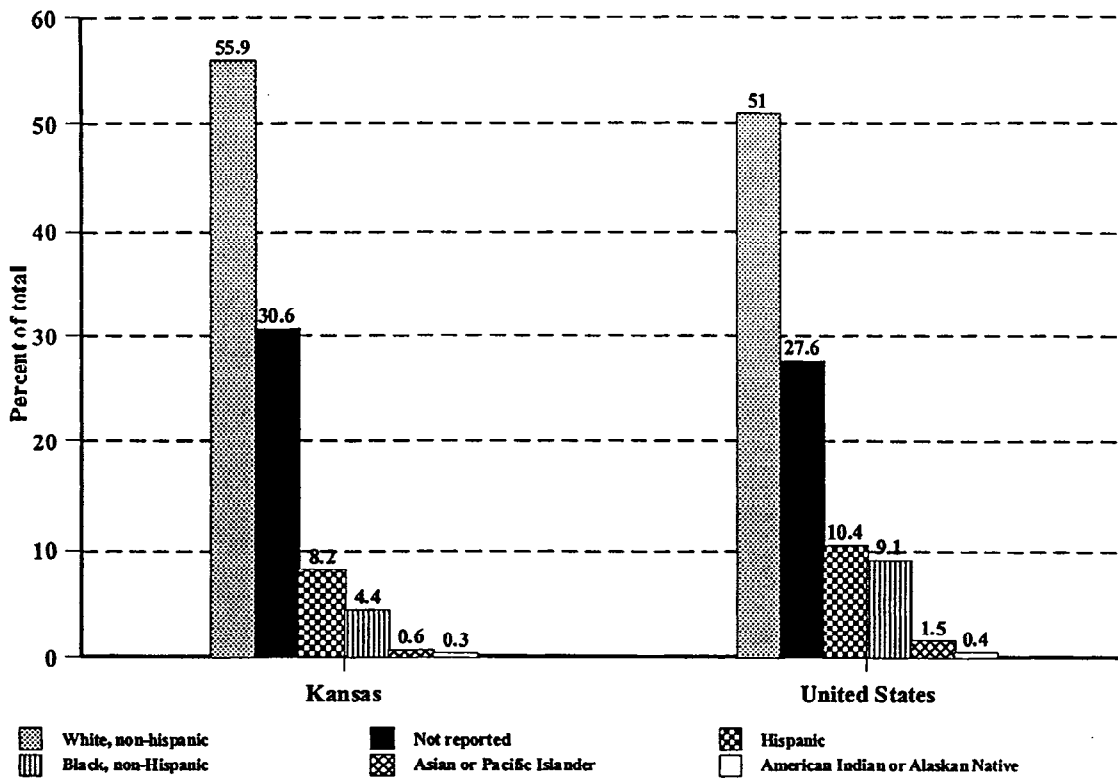


Precision, production, craft, and repair occupations constituted 17.7% of the state's injuries and illnesses with 3,054 reported cases. Almost half of the mining industry's accidents occurred here, with 46.5%, or 84, work related injuries and illnesses occurring to precision, production, craft, and repair workers. Across the nation, similar percentages were reported, with the United States' private industry accounting for 17.0%, or 293,470 workers injured in precision, production, craft, or repair occupations. (Tables 9 & 14, Chart 9)

The service occupational category encompassed 15.1% of the total injuries and illnesses in Kansas. Not surprisingly, the majority of the service industry injuries were found in this occupational division, 55.9%, or 1,687, of the reported cases were to people who worked in service related jobs. (Tables, 9 & 14, Chart 9)

The agriculture, forestry, and fishing industry had injuries or illnesses in only two of their occupational divisions. Farming, forestry, and fishing workers were involved in 97 accidents, or 39.3% of the industry's total. The operators, fabricators, and laborers occupational category in this industry suffered the remaining 19 injuries, comprising only 7.8% of the total. (Tables 9 & 14, Chart 9)

Chart 10. Nonfatal Occupational Injuries & Illnesses
By Race or Ethnic Origin, Kansas, 1998



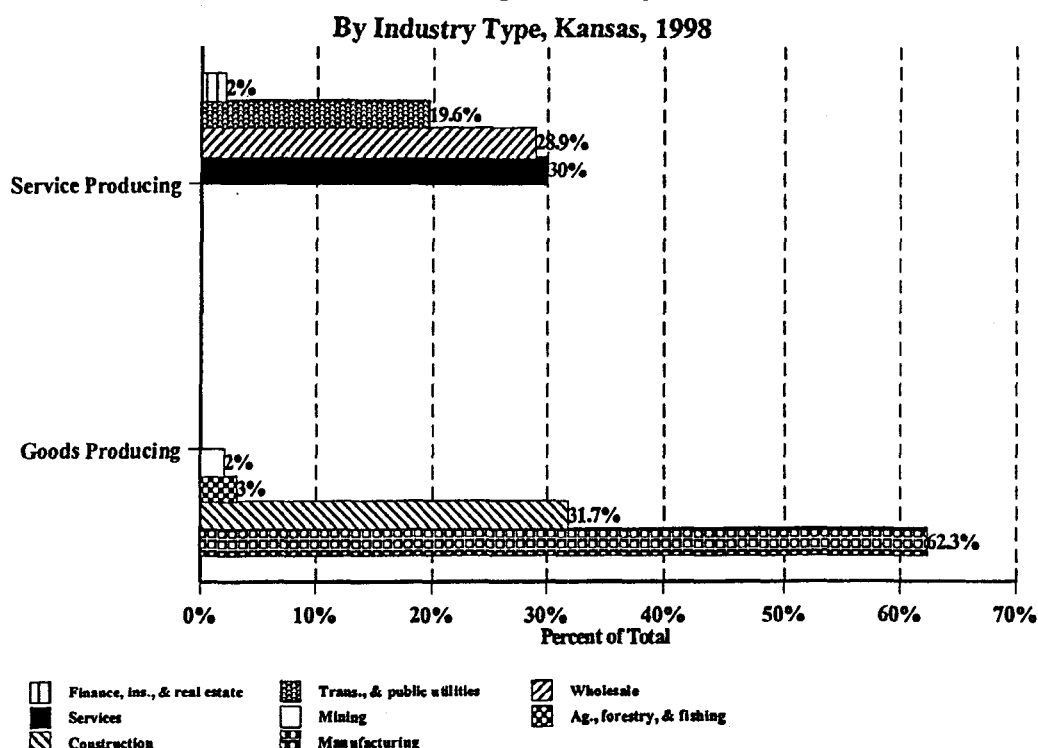
Considering the race of the person injured in workplace injuries and illnesses across Kansas during 1998, over half occurred to the white race, 55.9%, or 9,644 cases. In the manufacturing industry the white race experienced 2,485 work related injuries and illnesses, making it 55% of this industry's total. (Tables 7 & 8, Chart 10)

Persons of Hispanic origin were involved in 8.2% of work related injuries and illnesses, the black race, non-Hispanic origin were injured in 4.4% of the reported cases for Kansas in 1998. There were also 30.6%, or 5,270 reported cases where race was not indicated. (Tables 7 & 8, Chart 10)

Experience in the work place played a significant factor in the number of injuries workers suffered, 36.9% of all injuries occurred to employees with less than a year of experience on the job. This was especially true in the construction industry where over half, 53.2% of the workers injured had less than one year of experience, of those, 30.9% had been there less than 3 months. The retail trade industry also saw more than their share of injuries and illnesses involving employees with little experience, 46.1% of the total reported cases in this industry occurred to employees with only 1 to 11 months of experience at their job. (Tables 7 & 8, Chart 11)

Not all industries found a lack of experience to be the cause of their work related injuries. The finance, insurance, and real estate industry had 46.6% of their total injuries occur to workers with five years or more of experience. Nationally, only 29.2% of the injured workers in this industry had five years or more of experience. The mining industry had 35.4% of their work related injuries and illnesses occur to workers with 1 to 5 years of experience, while the workers with less than a year of experience encountered only 33.3% of the total for the mining industry. (Tables 7 & 8, Chart 11)

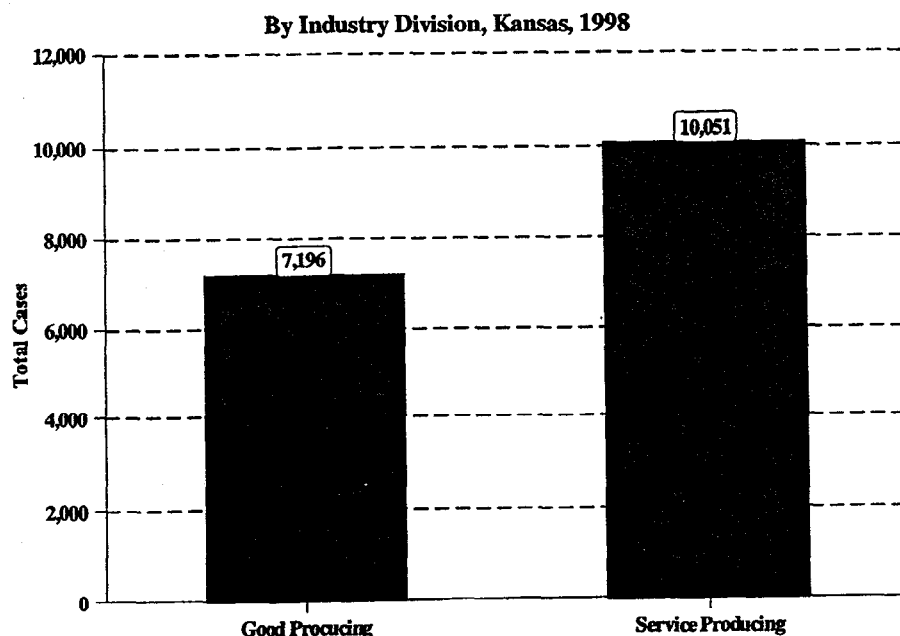
Chart 11. Nonfatal Occupational Injuries & Illnesses



It was again the service producing industries that experienced the majority of the injuries and illnesses for Kansas, with 10,051 reported cases, or 58% of the total. The services industry included just enough cases in 1998 to place it above all of the industries in the service producing division, with 3,017 cases involving lost work days, or 30% of the division's total. The retail trade industry was a close second with 28.9%, or 2,902 injuries and illnesses. Wholesale trade had 1,932 cases, or 19.2% and the service division of finance, insurance, and real estate had only 238 reported cases, less than 1%. (Tables 9, Charts 11 & 12)

In the goods producing arena it was the manufacturing industry that saw the most accidents in 1998, with 4,487 total injuries and illnesses with lost work days, or 62.3%. The construction industry had 31.7%, or 2,281 work related accidents. Both the mining industry and agriculture, forestry, and fishing industry had minimal contributions to this division, reporting only 181 and 247 injuries respectively. (Tables 9, Charts 11 & 12)

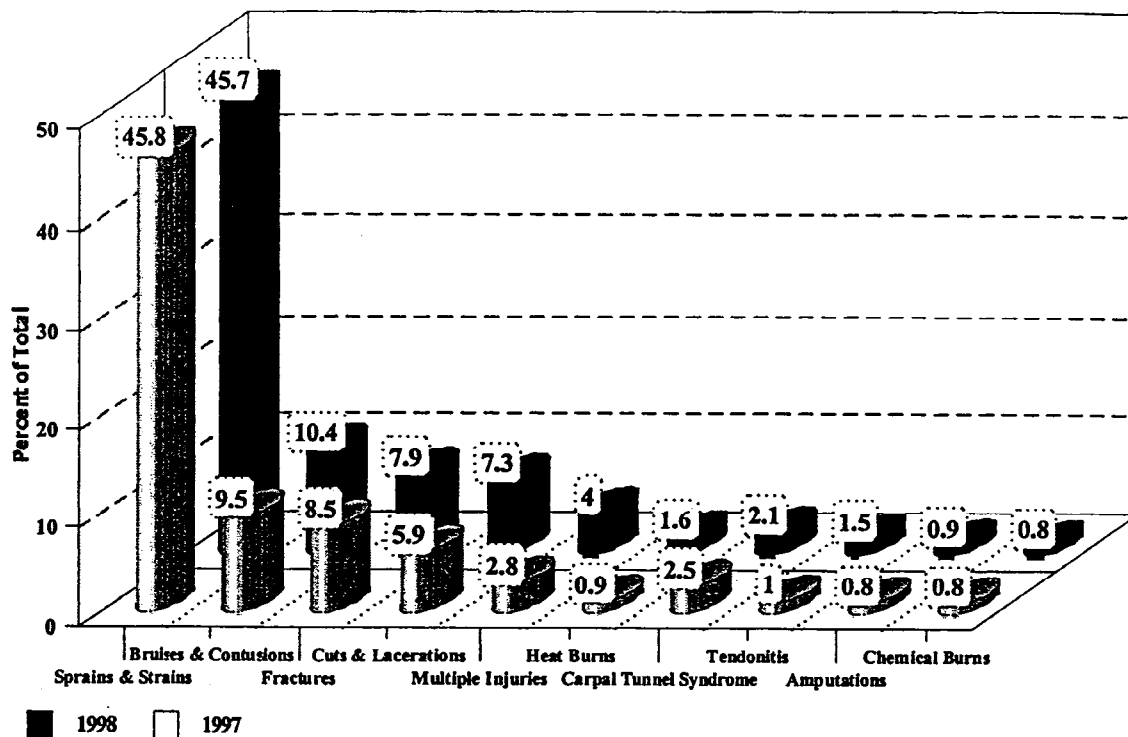
Chart 12. Nonfatal Occupational Injuries & Illnesses



Sprains and strains accounted for nearly half of the occupational injuries and illnesses in Kansas that involved days away from work with 45.7%, or 7,887 of the 17,247 reported cases. Bruises and contusions occurred in 1,800 of the injuries, or 10.4%. Fractures decreased from 8.5% to 7.9% as a source from 1997 to 1998. Carpal tunnel syndrome also decreased, going from 2.5% in 1997 to 2.1% in 1998. (Tables 10, 11, & 12, Chart 13)

Chart 13. Nonfatal Occupational Injuries & Illnesses

By Nature of Injury or Illness, Kansas, 1997 & 1998



With a large number of sprains and strains, it is no surprise that the trunk was the part of the body that was affected the most by these work related injuries and illnesses. There were 6,687 total reported cases, or 38.8% involved some part of the trunk. Most of those cases, 69.4%, or 4,645, involved the back region. The upper extremities of the body were involved in 23.7% of the cases. Of the cases that involved the upper extremities 25.5%, or 1,041 cases, were connected with the wrist. The lower extremities were affected in 3,666 injuries and illnesses at work in Kansas. The knee was the part of body involved most in the lower extremities, with 1,456 reported cases, or 39.7% of the total. (Tables 10, 11, & 12, Chart 14)

Overexertion was the event that injured the most people on the job in 1998, 4,878 of all reported injuries and illnesses in Kansas, or 28.3%, were due to overexertion of some kind. Overexertion in lifting was involved in 20.0% of all injuries, with 3,445 cases. Having contact with an object harmed 4,724 people while working, with over half, 58.1% of those injured, being struck by that object. Falls to the same level was the event that injured 10.8%. Falls to a lower level comprised 6.9%, dropping from 8.8% in 1997. (Tables 10, 11, & 12, Chart 15)

Chart 14. Nonfatal Occupational Injuries & Illnesses
By Part of Body, Kansas, 1998

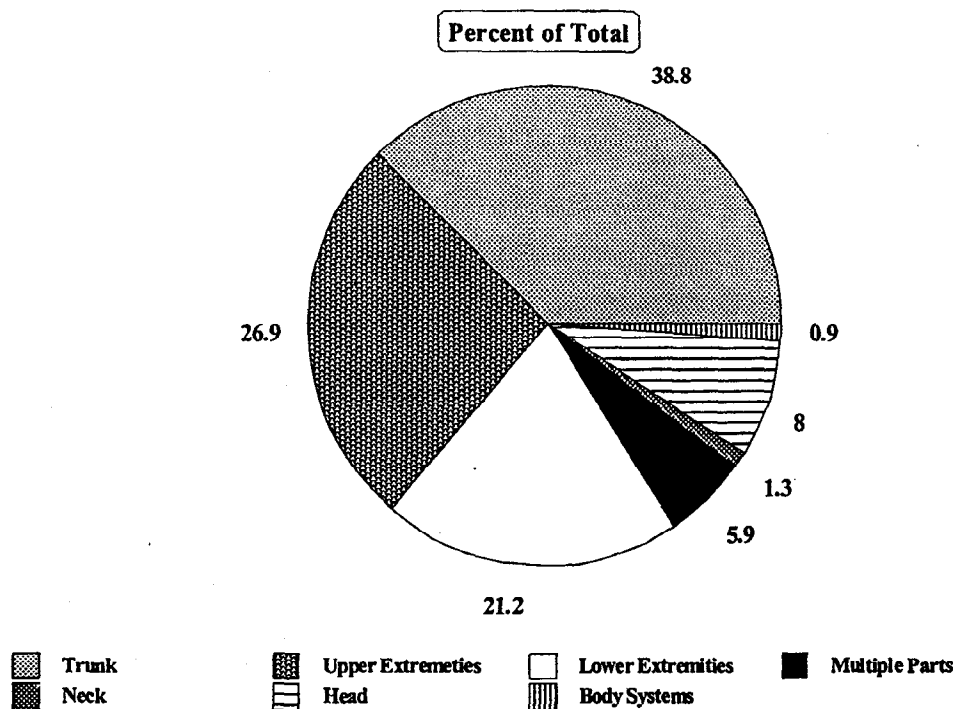
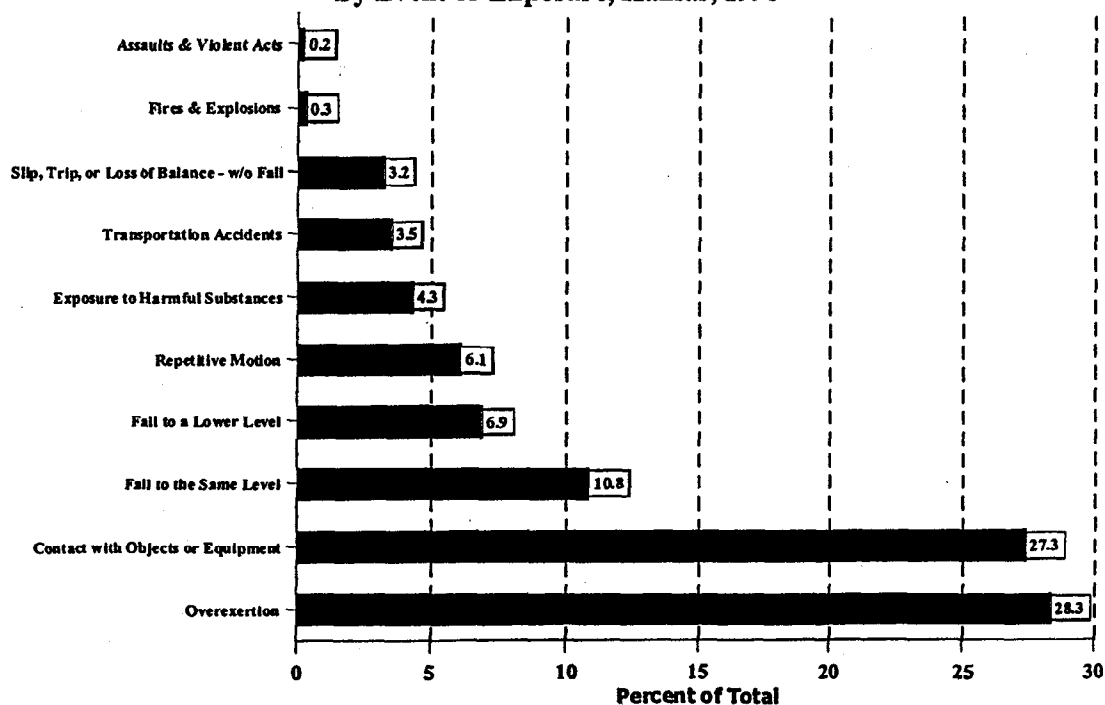
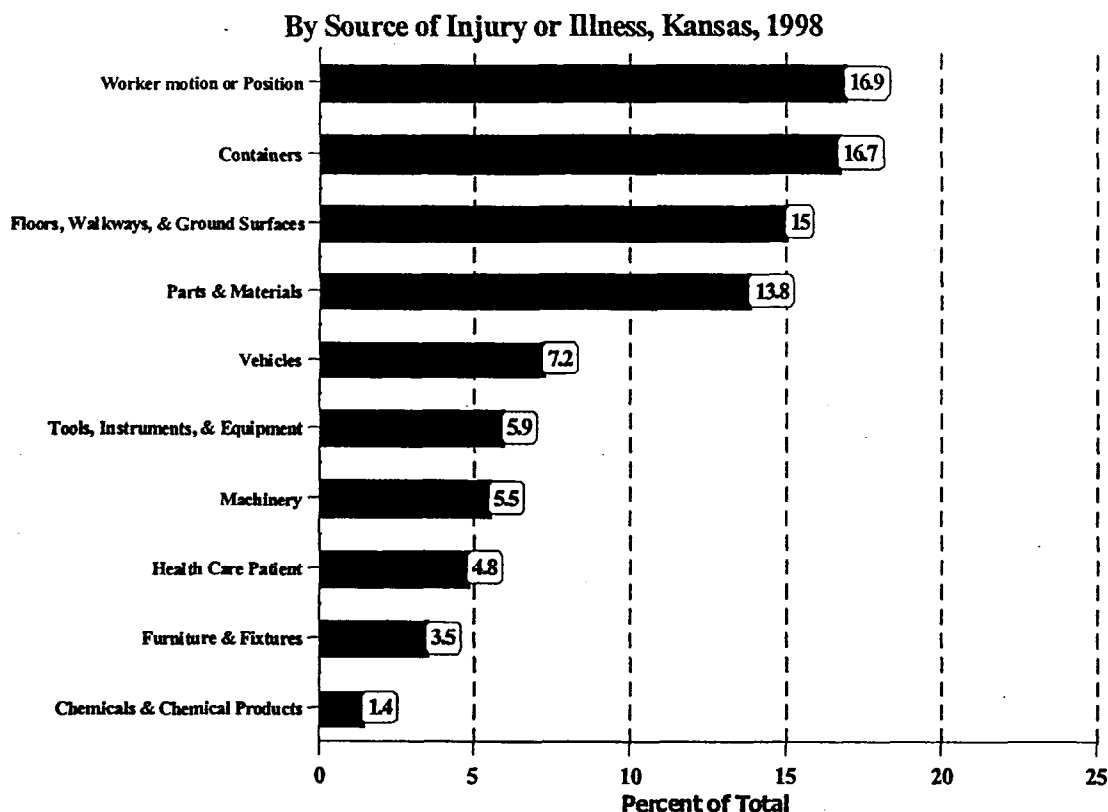


Chart 15. Nonfatal Occupational Injuries & Illnesses
By Event or Exposure, Kansas, 1998



Worker motion or position and containers, the two most frequently cited sources of work related injuries and illnesses in 1998, were also the most frequent source for sprains and strains in the workplace. Worker motion or position was the source for 2,918 accidents, or 16.9%. The manufacturing industry reported that 43.3% of their injuries were caused by the person's motion or position. Containers were the source of 16.7%, or 2,872 injuries and illnesses. The construction industry had the most accidents with containers in 1998, with 734 reported cases. (Tables 10, 11, & 12, Chart 16)

Chart 16. Nonfatal Occupational Injuries & Illnesses

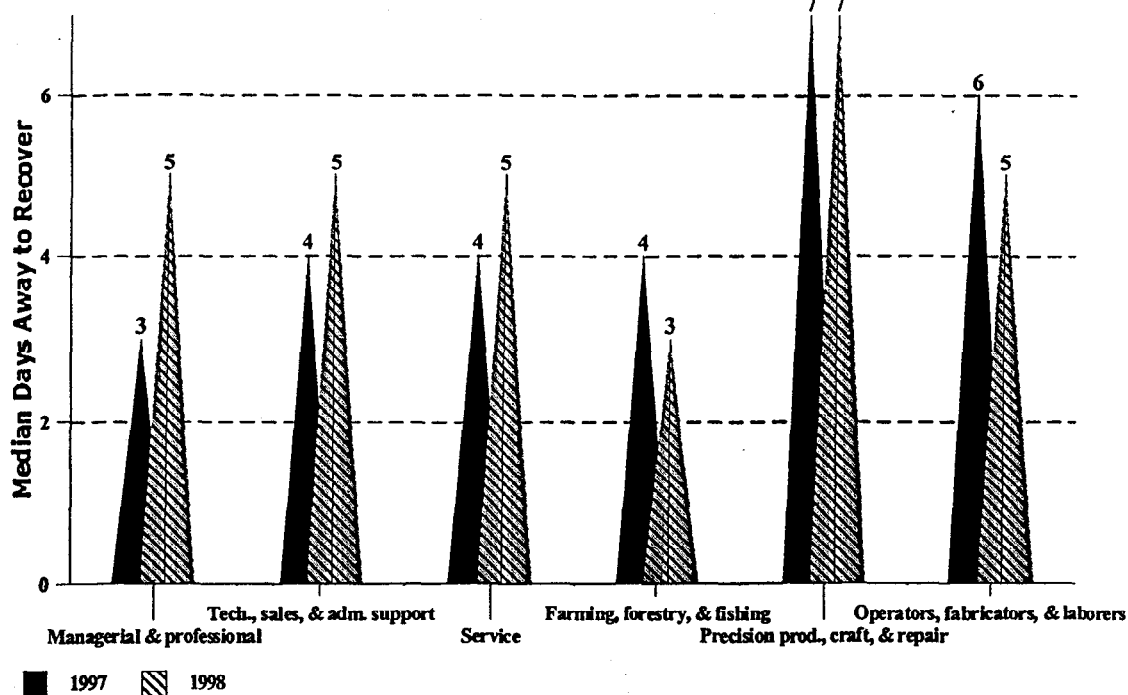


Floors, walkways, and ground surfaces was the source for 578 injuries in the retail trade industry, decreasing 44 cases from the previous year. Overall, floors, walkways, and ground surfaces were the source for 15%, or 2,589 of all injuries and illnesses across the state. (Tables 10, 11, & 12, Chart 16)

With 2,381 injuries and illnesses, parts and materials were the source of injury for 13.8% of the reported cases in 1998. The construction industry not only experienced most of their accidents from this source, but also had a 64.6% increase from 1997, going from 474 injuries to 734. (Tables 10, 11, & 12, Chart 16)

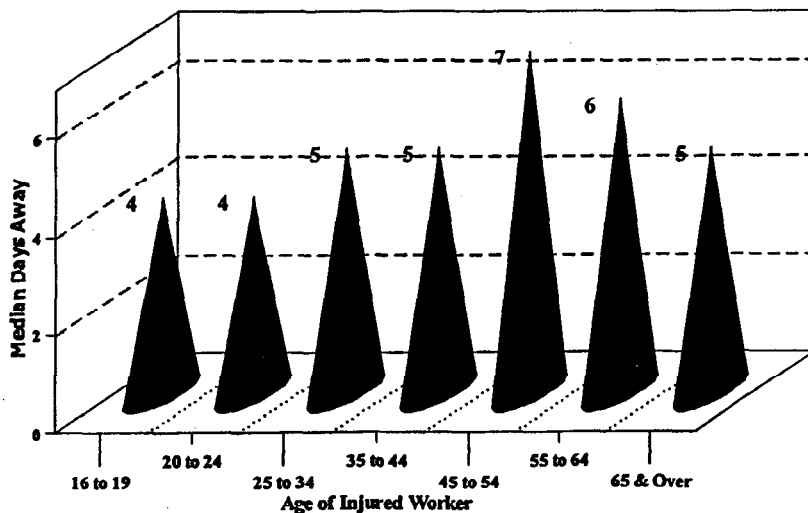
The retail trade industry experienced the most accidents where vehicles was the source of injury. Of those 1,238 injuries and illnesses involving vehicles 23%, or 282 occurred in retail trade. Tools, instruments, and equipment were sources of injury for 1,011 workers, machinery for 954, and health care patients were the source of 831 work related injuries and illnesses in Kansas. (Tables 10, 11, & 12, Chart 16)

Chart 17. Nonfatal Occupational Injuries & Illnesses
By Occupation and Median Days Away, Kansas, 1997 & 1998



Although 2,286 lost workday cases behind the leading occupation of operators, fabricators, and laborers, workers in the precision production, craft, and repair occupations required a median 7 days away to recover from injuries and illnesses incurred on the job. In 22.1% of this occupation's cases, the worker required 31 days away or more to recover from work related injuries. The farming, forestry, and fishing occupations needed only a median 3 days away to recover from their injuries. Of the 143 cases with days away, 35.9% of farming, forestry, and fishing's employees required only 2 days away from their job before returning to work. The median days away for all other occupations was 5 days. (Tables 13, 14, & 16, Chart 17)

Chart 18. Nonfatal Occupational Injuries & Illnesses
By Median Days Away from Work by Age Group, Kansas, 1998



Of the different age groups surveyed, it was the 45-54 age group that required the most time to recover, a median 7 days was needed. The 35-44 age group had the most cases, with 4,688 reported incidents which resulted in time away from work to recover. Workers 35 to 44 years of age who were injured also needed a median 5 days before returning to their jobs. The largest percentage of time away to recover for the 35 to 44 class was only one day, and involved 21.1% of this group. (Table 13, Chart 18)

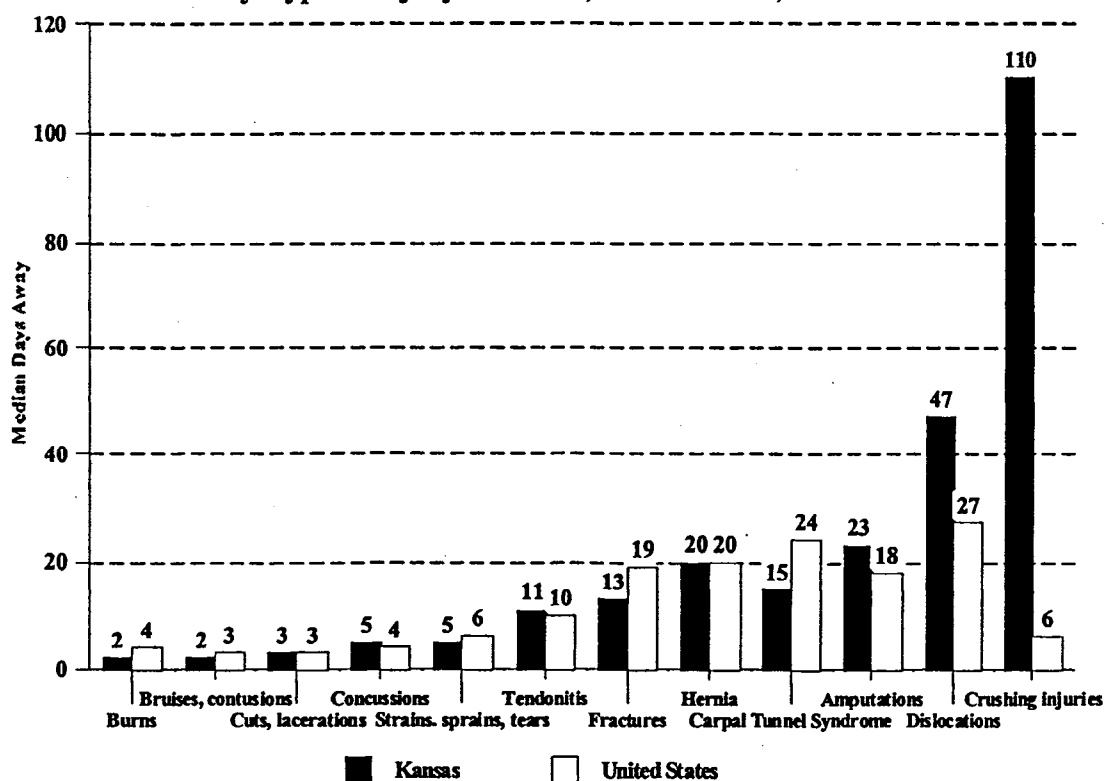
Illnesses had the highest median days away from work for recovery. Systemic diseases and disorders affected 1,541 people at work, and required a median 14 days for recovery. Traumatic injuries and disorders needed a median 5 days before returning to work. (Chart 19)

Although systemic diseases and disorders established a higher median as a major group, it was traumatic injuries and disorders that accumulated cases in specific categories with the highest median days. The recovery time needed for crushing injuries was very high for Kansas in 1998, 66.9% of these cases needed 31 days or more to return to work, and the median days away from work was 110. This placed Kansas well above the national median of 6 days for crushing injuries, only 19.1% of the nation's workers as a whole needed 31 days away from work or more to recover from their injuries. (Chart 19)

The length of recovery time for Kansas workers associated with dislocation injuries was also well above the national median. Dislocation injuries in Kansas required 31 days or more to recover, 68% of the time. The median days away for this nature of injury was 47 days. Across the nation, 46.3% of the dislocation injuries needed 31 or more days away from work, and the median nationally was 27 days. (Chart 19)

Chart 19. Median Days Away for Occupational Injuries & Illnesses

By Type of Injury or Illness, Kansas & US, 1998



Nationwide, Carpal Tunnel Syndrome took a median 24 days to recover, in Kansas it took only 15 days. Carpal Tunnel Syndrome is being detected earlier in the workplace now, and more preventative measures are being put into place, so this syndrome is declining steadily, both in Kansas and across the nation. In Kansas, Carpal Tunnel Syndrome has declined from 599 cases in 1991 to only 366 reported cases across the state in 1998. (Chart 19)

Hernia was the illness that had the second highest median days away in 1998, with 451 reported cases, almost half, or 42.5% needed 11 to 20 days to recuperate. Most of the hernias were unspecified, there were 300 cases where type was not indicated by the employer. (Chart 19)

Part Two

Tables

**Table 7. Percent Distribution of Nonfatal Injuries and Illnesses Involving Days Away from Work¹
By Industry and Selected Worker Characteristics, Kansas, 1998**

Characteristic	Private Industry ²	Goods Producing				Service Producing				
		Agricultur e forestry, & fishing ¹	Mining ³	Construc- tion	Manufac- turing	Transpor- tation & public utilities ³	Wholesale trade	Retail trade	Finance, insurance, & real estate	Services
Total cases {KS (17,247) }										
Sex:										
Men	68.5	93.3	100	98.8	73.9	72.3	94.8	54.4	51.3	29.0
Women	31.0	----	----	----	25.7	23.6	5.2	45.5	48.7	71.0
Age:										
16 to 19	5.5	----	----	4.4	3.1	3.5	----	17.2	----	2.7
20 to 24	14.7	----	20.2	23.1	14.1	11.8	10.4	12.3	----	15.6
25 to 34	27.2	53.4	39.8	26.0	25.9	31.7	27.9	29.8	----	22.5
35 to 44	28.2	----	29.8	30.7	29.0	33.3	31.2	21.2	19.2	29.6
45 to 54	15.2	----	6.4	8.1	17.7	14.5	10.7	11.3	48.5	22.2
55 to 64	7.7	----	3.7	7.6	8.8	4.9	17.6	4.3	7.1	5.1
65 & over	1.4	----	----	----	1.1	----	----	3.5	----	2.3
Occupation:										
Managerial & professional specialty	4.4	----	----	----	1.3	----	----	4.7	6.1	16.9
Technical, sales, & administrative support	13.5	----	----	----	6.4	7.3	19.7	33.6	59.6	13.1
Service	15.1	----	----	----	3.0	----	----	23.5	20.3	55.9
Farming, forestry, & fishing	0.8	39.3	----	----	0.3	----	----	----	7.8	----
Precision production, craft, & repair	17.7	----	46.5	44.7	19.9	13.2	9.2	15.3	----	5.7
Operators, fabricators, & laborers	48.4	48.8	51.5	54.2	68.9	78.0	70.2	22.6	----	8.1
Length of service with employer:										
Less than 3 months	18.0	----	14.6	30.9	18.1	----	15.6	20.8	----	19.6
3 to 11 months	18.9	38.5	18.7	22.3	15.3	8.3	19.0	25.3	13.0	21.4
1 to 5 years	25.4	34.7	35.4	28.8	24.1	11.4	13.8	34.5	31.6	31.0
More than 5 years	19.0	----	9.3	9.9	26.8	19.8	23.9	9.2	46.6	19.1
Not reported	18.6	----	22.0	8.1	15.7	60.1	27.7	10.3	----	9.0
Race or ethnic origin;										
White, non-Hispanic	55.9	87.4	38.2	58.2	55.4	24.9	49.4	66.2	79.4	66.0
Black, non-Hispanic	4.4	----	----	----	2.6	5.4	----	2.7	----	11.5
Hispanic	8.2	----	15.9	24.6	4.9	3.2	4.0	9.9	----	4.8
Asian or Pacific Islander	0.6	----	----	----	1.5	----	----	----	----	----
American Indian or Alaskan Native	0.3	----	----	----	----	----	----	----	----	----
Not reported	30.6	----	45.9	15.7	35.0	66.5	43.3	20.9	7.4	16.3

¹ Days-away-from-work cases include those which result in days away from work with or without restricted work activity

² Excludes farms with fewer than 11 employees

³ Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and employers in railroad Transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal industries.

NOTE: Dashes indicate data that are not available. Because of rounding and data exclusion of non-classifiable responses, data may not sum to totals.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor
In cooperation with participating State agencies.

**Table 8. Number of Nonfatal Injuries and Illnesses Involving Days Away from Work¹
By Industry and Selected Worker Characteristics, 1998**

Characteristic	Private Industry ²	Goods Producing				Service Producing				
		Agriculture forestry, & fishing ³	Mining ³	Construc- tion	Manufac- turing	Transpor- tation & public utilities ³	Wholesale trade	Retail trade	Finance, insurance, & real estate	Services
Total	17,247	247	181	2,281	4,487	1,962	1,932	2,902	238	3,017
Sex:										
Men	11,811	230	181	2,254	3,318	1,419	1,832	1,580	122	874
Women	5,341	----	----	----	1,154	464	100	1,321	116	2,143
Age:										
16 to 19	943	----	----	100	139	69	----	498	----	82
20 to 24	2,528	----	37	528	631	231	201	357	----	470
25 to 34	4,688	132	72	594	1,161	622	540	865	----	678
35 to 44	4,867	----	54	701	1,301	654	604	614	46	892
45 to 54	2,617	----	12	184	795	284	207	329	115	670
55 to 64	1,328	----	7	173	397	97	341	124	17	155
65 & over	248	----	----	----	49	----	----	103	----	71
Occupation:										
Managerial & professional specialty	762	----	----	----	57	----	----	137	15	510
Technical, sales, & administrative support	2,330	----	----	----	286	143	380	976	142	396
Service	2,602	----	----	----	132	----	----	683	48	1,687
Farming, forestry, & fishing	143	97	----	----	13	----	----	----	19	----
Precision production, craft, & repair	3,054	----	84	1,020	891	260	178	443	----	171
Operators, fabricators, & laborers	8,340	121	93	1,237	3,093	1,531	1,357	656	----	146
Length of service with employer:										
Less than 3 months	3,101	----	27	705	813	----	302	604	----	592
3 to 11 months	3,261	95	34	508	686	162	367	733	31	645
1 to 5 years	4,389	86	64	657	1,082	224	266	1,000	75	934
More than 5 years	3,283	----	17	225	1,202	388	461	266	111	576
Not reported	3,213	----	40	186	704	1,179	536	299	----	270
Race or ethnic origin;										
White, non-Hispanic	9,644	216	69	1,328	2,485	488	955	1,922	189	1,992
Black, non-Hispanic	754	----	----	----	118	105	----	78	----	347
Hispanic	1,420	----	29	562	222	63	78	286	----	145
Asian or Pacific Islander	108	----	----	----	67	----	----	----	----	----
American Indian or Alaskan Native	52	----	----	----	----	----	----	----	----	----
Not reported	5,270	----	83	358	1,572	1,306	836	607	18	491

¹ Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

² Excludes farms with fewer than 11 employees.

³ Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of Transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal industries.

Note: Because of rounding, components may not add to totals.

Note: Dashes indicate data that are not available.

Source: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with State Agencies.

**Table 9. Number of Nonfatal Occupational Injuries and Illnesses Involving Days Away from Work¹
By Industry and Selected Occupations, Kansas, 1998**

Occupation	Private Industry ²	Goods Producing				Service Producing				
		Agriculture forestry, & fishing ²	Mining ³	Construc- tion	Manufac- turing	Transpor- tation & public utilities ³	Wholesale trade	Retail trade	Finance, insurance, & real estate	Services
Total:	17,247	247	181	2,281	4,487	1,962	1,932	2,902	238	3,017
Managerial & professional specialty	762	----	----	----	57	----	----	137	15	510
Executive, administrative, & managerial	271	----	----	----	54	----	----	126	15	51
Professional specialty	491	----	----	----	----	----	----	----	----	460
Registered Nurses	263	----	----	----	----	----	----	----	----	263
Technical, sales, & administrative support	2,330	----	----	----	286	143	380	976	142	396
Technicians and related support	323	----	----	----	61	----	----	----	----	231
Sales	1,217	----	----	----	30	----	282	821	46	----
Supervisors & proprietors, sales occ.	417	----	----	----	----	----	165	227	----	----
Cashiers	254	----	----	----	----	----	----	252	----	----
Administrative support, including clerical	790	----	----	----	195	127	76	155	95	134
Traffic, shipping, & receiving clerks	81	----	----	----	42	----	----	----	----	----
Service	2,602	----	----	----	132	----	----	683	48	1,687
Protective service	126	----	----	----	----	----	----	----	----	62
Service, except protective & household	2,476	----	----	----	132	----	----	619	48	1,625
Waiters & waitresses	146	----	----	----	----	----	----	83	----	64
Cooks	328	----	----	----	----	----	----	179	----	147
Kitchen workers, food preparation	143	----	----	----	----	----	----	143	----	----
Health aids, exc. nursing	105	----	----	----	----	----	----	----	----	105
Nursing aids, orderlies, and attendants	837	----	----	----	----	----	----	----	----	837
Janitors & cleaners	577	----	----	----	130	----	----	----	39	301
Farming, forestry, & fishing	143	97	----	----	13	----	----	----	19	----
Farm workers	72	----	----	----	----	----	----	----	----	----
Groundskeepers & gardeners, exc. farm	60	----	----	----	----	----	----	----	19	----
Precision, production, craft, & repair	3,054	----	84	1,020	891	230	178	443	----	171
Mechanics & repairers	951	----	----	65	283	172	112	188	----	122
Automobile mechanics	170	----	----	----	----	----	----	107	----	63
Bus, truck, and stationary engine mechanics	174	----	----	----	----	144	----	----	----	----

**Table 9. Number of Nonfatal Occupational Injuries and Illnesses Involving Days Away from Work¹
By Industry and Selected Occupations, Kansas, 1998, continued**

✓✓

Occupation	Private Industry ²	Goods Producing				Service Producing				
		Agriculture forestry, & fishing ²	Mining ³	Construc- tion	Manufac- turing	Transpor- tation & public utilities ³	Wholesale trade	Retail trade	Finance, insurance, & real estate	Services
Precision, production, craft, & repair, continued										
Construction trades	1,161	----	11	951	63	----	----	83	----	----
Carpenters	236	----	----	190	----	----	----	----	----	----
Roofers	274	----	----	270	----	----	----	----	----	----
Precision production	871	----	----	----	545	74	----	172	----	----
Precision assemblers, metal	133	----	----	----	133	----	----	----	----	----
Butchers & meat cutters	338	----	----	----	168	----	----	129	----	----
Operators, fabricators, & laborers	8,340	121	93	1,237	3,093	1,531	1,357	656	----	246
Machine operators and tenders	1,956	----	5	----	1,759	----	----	----	----	----
Fabricators, assemblers, & handworking	675	----	----	----	569	----	----	----	----	19
Welders & cutters	236	----	----	----	160	----	----	----	----	19
Assemblers	335	----	----	----	313	----	----	----	----	----
Production inspectors, testers, & weighers	156	----	----	----	100	----	----	----	----	18
Transportation & material moving ³	1,521	----	70	121	115	647	348	108	----	70
Truck drivers	1,113	----	----	----	----	571	277	89	----	66
Handlers, equipment cleaners, and laborers	4,032	----	17	1,066	549	829	920	502	----	104
Construction laborers	779	----	----	776	----	----	----	----	----	----
Stock handlers & baggers	463	----	----	----	39	----	170	246	----	----
Laborers, non-construction	867	----	15	----	158	49	466	72	----	61

¹ Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

² Excludes farms with fewer than 11 employees.

³ Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal industries.

Note: Because of rounding, components may not add to totals

Note: Dashes indicate data that are not available.

Source: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with State Agencies.

**Table 10. Percent Distribution of Nonfatal Occupational Injuries & Illnesses Involving Days Away from Work ¹
By Industry and Selected Case Characteristics, Kansas, 1998**

Characteristics	Private Industry ²	Goods Producing				Service Producing				
		Agriculture forestry, & fishing ²	Mining ³	Construc- tion	Manufac- turing	Transpor- tation & public utilities ³	Wholesale trade	Retail trade	Finance, insurance, & real estate	Services
Total: { 17,247 cases }	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nature of Injury, Illness:										
Sprains, strains	45.7	----	17.0	35.9	35.1	60.0	50.8	46.5	63.5	58.2
Bruises, contusions	10.4	----	30.3	3.4	9.1	18.8	9.1	13.0	----	9.6
Cuts, lacerations	7.3	----	13.0	8.9	9.7	3.6	----	11.3	----	4.4
Fractures	7.9	28.7	11.4	16.9	7.2	2.5	7.5	4.1	----	7.4
Heat burns	1.6	----	----	2.9	1.0	----	----	4.5	----	----
Carpal tunnel syndrome	2.1	----	----	----	4.5	----	----	----	13.9	2.5
Tendonitis	1.5	----	----	----	3.9	----	----	----	----	----
Chemical burns	0.8	----	----	----	1.9	----	----	----	----	----
Amputations	0.9	----	----	----	1.7	----	----	----	----	----
Multiple injuries	4.0	----	9.2	9.8	2.2	----	4.3	3.6	----	3.7
Part of body affected:										
Head	8.0	----	20.8	10.2	8.8	4.6	6.3	11.1	6.2	5.4
Eye	3.2	----	12.6	5.8	5.5	0.9	----	----	----	2.1
Neck	1.3	----	----	----	2.0	2.2	----	----	----	----
Trunk	38.8	----	28.8	24.4	32.7	44.9	49.9	37.2	37.5	51.3
Shoulder	4.1	----	----	----	4.2	3.9	3.6	----	5.5	8.3
Back	26.9	----	21.7	17.4	21.7	33.6	32.9	27.6	28.7	35.3
Upper extremities	23.7	----	29.1	26.4	32.2	23.3	20.4	21.2	23.4	13.8
Wrist	6.0	----	----	2.8	8.7	6.4	11.9	----	17.3	4.4
Hand, except finger	4.5	----	5.7	7.5	3.4	3.1	3.8	8.8	----	1.9
Finger	8.6	----	16.1	13.6	13.4	6.3	----	6.7	----	4.5
Lower extremities	21.3	53.4	12.7	27.2	18.4	19.6	18.8	23.4	19.0	19.6
Knee	8.4	----	5.4	13.3	6.3	4.5	4.5	11.6	----	9.2
Foot, except toe	3.5	----	----	5.1	4.2	4.5	4.8	----	----	1.5
Toe	0.9	----	----	----	1.7	----	----	----	----	0.6
Body systems	0.9	----	----	----	0.7	----	----	----	----	----
Multiple parts	5.9	----	6.4	9.2	4.8	5.4	3.7	4.4	13.8	8.4

**Table 10. Percent Distribution of Nonfatal Occupational Injuries and Illnesses Involving Days Away from Work¹
By Industry and Selected Characteristics, Kansas, 1998, continued**

Characteristics	Private industry ²	Goods Producing				Service Producing				
		Agriculture forestry, & fishing ³	Mining ³	Construc- tion	Manufac- turing	Transpor- tation & public utilities ³	Wholesale trade	Retail trade	Finance, insurance, & real estate	Services
Source of injury:										
Chemicals & chemical products	1.4	----	----	----	3.1	----	----	----	----	1.6
Containers	16.7	----	7.2	2.9	10.3	35.8	37.8	23.9	----	5.5
Furniture & fixtures	3.5	----	----	----	2.2	----	4.6	8.9	----	4.4
Machinery	5.5	----	10.9	6.9	9.5	----	----	5.4	----	2.8
Parts & materials	13.8	----	44.5	32.2	16.2	16.1	13.0	5.7	----	2.2
Worker motion or position	16.9	----	3.0	9.5	28.2	14.2	11.2	11.2	31.1	17.8
Floors, walkways, & ground surfaces	15.0	32.0	12.1	18.3	8.6	11.0	16.4	19.9	23.8	17.1
Tools, instruments, & equipment	5.9	----	9.0	9.1	8.3	2.5	----	3.6	----	6.4
Vehicles	7.2	----	----	9.4	2.8	11.6	7.7	9.7	12.8	6.8
Health care patient	4.8	----	----	----	----	----	----	----	----	27.5
Event or exposure:										
Contact with objects & equipment	27.4	----	64.7	39.2	31.5	29.1	23.1	27.6	----	14.1
Struck by object	15.9	----	44.8	27.5	13.9	18.0	16.3	15.1	----	9.2
Struck against object	5.7	----	10.0	2.7	6.6	6.5	4.8	10.4	6.7	2.2
Caught in equipment or object	3.9	----	6.8	5.6	7.7	----	----	----	----	2.4
Fall to lower level	6.9	----	5.1	15.9	3.1	3.8	12.0	5.5	13.5	4.8
Fall to same level	10.8	----	8.2	8.7	7.3	9.7	7.5	15.0	----	15.1
Slips, trips, loss of balance -- without fall	3.2	----	----	----	2.0	5.7	5.9	3.0	----	3.6
Overexertion	28.3	----	18.0	13.4	22.2	34.8	40.7	27.9	21.0	38.9
Overexertion in lifting	20.0	----	4.5	8.5	13.9	24.9	31.1	21.5	16.2	28.4
Repetitive motion	6.2	----	----	----	15.3	3.9	----	----	20.0	3.9
Exposure to harmful substances	4.3	----	----	6.6	5.6	----	----	6.6	----	3.3
Transportation accidents	3.5	----	----	5.6	0.8	2.9	3.8	4.6	----	4.6
Fires & explosions	0.3	----	----	----	0.4	----	----	----	----	----
Assaults & violent acts by person	0.3	----	----	----	----	----	----	----	----	----

¹ Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

² Excludes farms with fewer than 11 employees.

³ Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal industries.

Note: Because of rounding, components may not add to totals

Note: Dashes indicate data that are not available.

Source: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with State Agencies.

Table 11. Number of Nonfatal Occupational Injuries & Illnesses Involving Days Away from Work ¹
By Industry and Selected Case Characteristics, Kansas, 1998

Characteristics	Private Industry ²	Goods Producing				Service Producing				
		Agriculture forestry, & fishing ²	Mining ³	Construc- tion	Manufac- turing	Transpor- tation & public utilities ³	Wholesale trade	Retail trade	Finance, insurance, & real estate	Services
Total:	17,247	247	181	2,281	4,487	1,962	1,932	2,902	238	3,017
Nature of injury, illness:										
Sprains, strains	7,787	----	31	819	1,576	1,178	982	1,350	151	1,757
Bruises, contusions	1,800	----	55	77	410	369	176	377	----	289
Cuts, lacerations	1,251	----	24	202	435	71	----	327	----	132
Fractures	1,355	71	21	386	322	48	144	118	----	224
Heat burns	279	----	----	67	44	----	----	130	----	----
Carpal tunnel syndrome	366	----	----	----	203	----	----	----	33	75
Tendonitis	255	----	----	----	175	----	----	----	----	----
Chemical burns	133	----	----	----	86	----	----	----	----	----
Amputations	156	----	----	----	74	----	----	----	----	----
Multiple injuries	689	----	17	223	99	----	83	104	----	111
Part of body affected:										
Head	1,382	----	38	233	393	90	121	321	15	164
Eye	558	----	23	133	246	19	----	----	----	62
Neck	230	----	----	----	94	43	----	----	----	----
Trunk	6,687	----	52	556	1,468	880	965	1,080	89	1,549
Shoulder	701	----	----	----	187	77	69	----	13	250
Back	4,645	----	39	396	972	660	635	801	68	1,066
Upper extremities	4,087	----	53	602	1,444	458	395	617	56	418
Wrist	1,041	----	----	63	391	126	229	----	41	133
Hand, except finger	784	----	10	171	151	62	73	255	----	58
Finger	1,492	----	29	311	603	124	----	194	----	135
Lower extremities	3,666	132	23	620	827	385	363	680	45	592
Knee	1,456	----	10	304	281	89	88	336	----	279
Foot, except toe	610	----	----	116	188	88	94	----	----	44
Toe	160	----	----	----	75	----	----	----	----	18
Body systems	154	----	----	----	32	----	----	----	----	----
Multiple parts	1,026	----	12	210	214	106	71	128	33	253

**Table 11. Number of Nonfatal Occupational Injuries & Illnesses Involving Days Away from Work ¹
By Industry and Selected Worker Characteristics, Kansas, 1998, continued**

Characteristics	Private industry ²	Goods Producing				Service Producing				
		Agriculture forestry, & fishing ³	Mining ³	Construc- tion	Manufac- turing	Transpor- tation & public utilities ³	Wholesale trade	Retail trade	Finance, insurance, & real estate	Services
Source of injury:										
Chemicals & chemical products	248	----	----	----	138	----	----	----	----	48
Containers	2,872	----	13	67	462	703	730	694	----	165
Furniture & fixtures	610	----	----	----	99	----	90	259	----	134
Machinery	954	----	20	157	428	----	----	156	----	84
Parts & materials	2,381	----	81	734	725	316	252	165	----	66
Worker motion or position	2,918	----	6	217	1,265	278	216	325	74	537
Floors, walkways, & ground surfaces	2,589	79	22	417	388	216	317	578	57	516
Tools, instruments, & equipment	1,011	----	16	207	374	49	----	105	----	194
Vehicles	1,238	----	----	215	127	228	148	282	30	204
Health care patient	831	----	----	----	----	----	----	----	----	829
Event or exposure:										
Contact with objects & equipment	4,724	----	117	894	1,411	571	446	802	----	426
Struck by object	2,745	----	81	628	625	354	315	437	----	278
Struck against object	983	----	18	62	298	127	92	301	16	67
Caught in equipment or object	668	----	12	129	347	----	----	----	----	72
Fall to lower level	1,190	----	9	363	138	75	232	158	32	143
Fall to same level	1,856	----	15	199	328	190	145	435	----	456
Slips, trips, loss of balance -- without fall	560	----	----	----	90	111	113	87	----	108
Overexertion	4,878	----	33	305	995	683	787	810	50	1,173
Overexertion in lifting	3,445	----	8	195	624	488	600	624	39	858
Repetitive motion	1,062	----	----	----	685	77	----	----	48	118
Exposure to harmful substances	736	----	----	150	253	----	----	192	----	98
Transportation accidents	597	----	----	128	38	57	73	134	----	139
Fires & explosions	57	----	----	----	18	----	----	----	----	----
Assaults & violent acts by person	44	----	----	----	----	----	----	----	----	----

¹ Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

² Excludes farms with fewer than 11 employees.

³ Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal industries.

Note: Because of rounding, components may not add to totals

Note: Dashes indicate data that are not available.

Source: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with State Agencies.

**Table 12. Incidence Rates ¹ of Nonfatal Occupational Injuries and Illnesses Involving Days Away from Work²
By Industry and Selected Case Characteristics, Kansas, 1998**

Characteristics	Private Industry ³	Goods Producing				Service Producing				
		Agriculture forestry, & fishing ³	Mining ⁴	Construc- tion	Manufac- turing	Transpor- tation & public utilities ⁴	Wholesale trade	Retail trade	Finance, insurance, & real estate	Services
Total: { 17,247 cases }	194.8	202.7	250.1	417.6	208.1	274.6	267.7	172.6	42.5	133.0
Nature of Injury, illness:										
Sprains, strains	89.1	----	42.6	146.4	73.1	164.8	136.1	80.3	27.0	77.5
Bruises, contusions	20.3	----	75.8	13.7	19.0	53.6	24.4	22.4	----	12.8
Cuts, lacerations	14.1	----	32.5	36.1	20.2	9.9	----	19.5	----	5.8
Fractures	15.3	58.3	28.6	68.9	14.9	6.8	20.0	7.0	----	9.9
Heat burns	3.2	----	----	12.0	2.0	----	----	7.7	----	----
Carpal tunnel syndrome	4.1	----	----	----	9.4	----	----	----	5.9	3.3
Tendonitis	2.9	----	----	----	8.1	----	----	----	----	----
Chemical burns	1.5	----	----	----	4.0	----	----	----	----	----
Amputations	1.8	----	----	----	3.4	----	----	----	----	----
Multiple injuries	7.8	----	23.1	39.9	4.6	----	11.4	6.2	----	4.9
Part of body affected:										
Head	15.6	----	52.0	41.6	18.2	12.5	16.8	19.1	2.6	7.2
Eye	6.3	----	31.4	23.7	11.4	2.6	----	----	----	2.8
Neck	2.6	----	----	----	4.4	6.0	----	----	----	----
Trunk	75.5	----	72.0	99.3	68.1	123.2	133.7	64.2	16.0	68.3
Shoulder	7.9	----	----	----	8.7	10.8	9.6	----	2.3	11.0
Back	52.5	----	54.3	70.8	45.1	82.3	88.0	47.7	12.2	47.0
Upper extremities	46.2	----	72.8	107.7	67.0	64.1	54.7	36.7	10.0	18.4
Wrist	11.8	----	----	11.2	18.1	17.7	31.7	----	7.3	5.9
Hand, except finger	8.9	----	14.3	30.5	7.0	8.6	10.1	15.2	----	2.5
Finger	16.8	----	40.3	55.5	28.0	17.3	----	11.5	----	6.0
Lower extremities	41.4	108.3	31.7	110.8	38.4	53.9	50.2	40.4	8.1	26.1
Knee	16.4	----	13.6	54.4	13.0	12.4	12.2	20.0	----	12.3
Foot, except toe	6.9	----	----	20.8	8.7	12.3	13.0	----	----	1.9
Toe	1.8	----	----	----	3.5	----	----	----	----	----
Body systems	1.7	----	----	----	1.5	----	----	----	----	----
Multiple parts	11.6	----	15.9	37.6	9.9	14.8	9.9	7.6	5.9	11.1

**Table 12. Incidence Rates ¹ of Nonfatal Occupational Injuries & Illnesses Involving Days Away from Work ²
By Industry and Selected Worker Characteristics, Kansas, 1998, continued**

Characteristics	Private industry ³	Goods Producing				Service Producing				
		Agriculture forestry, & fishing ³	Mining ⁴	Construction	Manufacturing	Transportation & public utilities ⁴	Wholesale trade	Retail trade	Finance, insurance, & real estate	Services
Source of injury:										
Chemicals & chemical products	2.8	----	----	----	6.4	----	----	----	----	2.1
Containers	32.4	----	18.0	11.9	21.4	98.4	101.2	41.3	----	7.3
Furniture & fixtures	6.9	----	----	----	4.6	----	12.4	15.4	----	5.9
Machinery	10.8	----	27.4	28.0	19.9	----	----	9.3	----	3.7
Parts & materials	26.9	----	111.4	131.2	33.6	44.2	34.9	9.8	----	2.9
Worker motion or position	33.0	----	7.6	38.8	58.7	38.9	30.0	19.3	13.2	23.7
Floors, walkways, & ground surfaces	29.2	64.8	30.4	74.5	18.0	30.3	43.9	34.4	10.1	22.8
Tools, instruments, & equipment	11.4	----	22.6	37.0	17.3	6.8	----	6.3	----	8.6
Vehicles	14.0	----	----	38.5	5.9	31.9	20.5	16.8	5.4	9.0
Health care patient	9.4	----	----	----	----	----	----	----	----	36.6
Event or exposure:										
Contact with objects & equipment	53.3	----	161.7	159.8	65.5	79.9	61.8	47.7	----	18.8
Struck by object	31.0	----	112.1	112.3	29.0	49.5	43.6	26.0	----	12.3
Struck against object	11.1	----	25.0	11.2	13.8	17.8	12.7	17.9	2.8	3.0
Caught in equipment or object	7.5	----	17.1	23.0	16.1	----	----	----	----	3.2
Fall to lower level	13.4	----	12.7	64.9	6.4	10.5	32.1	9.4	5.8	6.3
Fall to same level	21.0	----	20.5	35.6	15.2	26.6	20.1	22.9	----	20.1
Slips, trips, loss of balance - - without fall	6.3	----	----	----	4.2	15.5	15.7	5.2	----	4.8
Overexertion	55.1	----	44.9	54.5	46.1	95.6	109.0	48.2	9.0	51.7
Overexertion in lifting	38.9	----	11.3	34.8	28.9	68.3	83.2	37.1	6.9	37.8
Repetitive motion	12.0	----	----	----	31.8	10.8	----	----	8.5	5.2
Exposure to harmful substances	8.3	----	----	26.8	11.7	----	----	11.4	----	4.3
Transportation accidents	6.7	----	----	22.8	1.8	8.0	10.2	8.0	----	6.1
Fires & explosions	----	----	----	----	----	----	----	----	----	----
Assaults & violent acts by person	----	----	----	----	----	----	----	----	----	----

¹ Incidence rates represent the number of injuries and illnesses per 10,000 full time workers and were calculated as: (N/EH) X 20,000,000 where

N = number of injuries and illnesses
EH = total hours worked by all employees during a calendar year
20,000,000 = base for 10,000 equivalent full-time workers
(Working 40 hours a week, 50 weeks a year).

² Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

³ Excludes farms with fewer than 11 employees.

⁴ Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal industries.

Note: Because of rounding, components may not add to totals

Note: Dashes indicate data that are not available.

Source: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries & Illnesses in Cooperation with participating state agencies.

**Table 13. Percent Distribution of Nonfatal Occupational Injuries & Illnesses Involving Days Away from Work ¹
By Selected Worker Characteristics and Number of Days Away, Kansas, 1998**

Characteristic	Total Cases	Percent of cases involving							Median days away from work
		1 day	2 days	3 to 5 days	6 to 10 days	11 to 20 days	21 to 30 days	31 days or more	
Total:	17,247	19.6	14.4	19.6	11.2	11.4	6.3	17.6	5
Sex:									
Men	11,811	19.2	14.4	19.3	11.6	12.7	5.5	17.4	5
Women	5,341	20.4	14.6	20.5	10.3	8.6	7.9	17.7	5
Age:									
16 to 19	943	16.4	20.4	21.9	14.9	16.3	1.0	9.1	4
20 to 24	2,528	26.5	15.3	19.7	8.9	10.9	4.1	14.6	4
25 to 34	4,688	21.1	15.1	19.3	11.0	11.6	7.6	14.3	5
35 to 44	4,867	17.8	12.9	21.5	12.2	12.7	6.1	16.8	5
45 to 54	2,617	19.5	13.1	13.8	11.9	9.1	6.1	26.5	7
55 to 64	1,328	9.2	14.9	22.9	9.7	8.9	9.9	24.6	6
65 and over	248	14.1	11.7	25.2	4.8	7.0	11.0	26.2	5
Occupation:									
Managerial & professional	762	26.7	10.8	14.5	12.3	14.8	3.3	17.7	5
Tech., sales, and adm. spprt	2,330	18.9	16.9	17.1	16.6	4.9	10.7	15.0	5
Service	2,602	12.5	16.2	30.5	8.3	11.0	3.7	17.8	5
Farming, forestry, fishing	143	13.9	35.9	29.6	3.7	7.8	7.7	1.3	3
Precision prod., craft, repair	3,054	18.7	11.0	14.7	12.2	17.0	4.2	22.1	7
Op., fabricators, laborers	8,340	21.6	14.4	19.1	10.2	11.0	6.9	16.9	5
Length of Service:									
Less than 3 months	3,101	21.7	20.5	11.9	12.4	13.1	4.1	16.4	4
3 to 11 months	3,261	21.8	12.8	27.1	10.5	7.9	7.2	12.7	4
1 to 5 years	4,389	20.0	11.8	23.0	11.8	11.0	4.9	17.5	5
More than 5 years	3,283	17.1	16.5	10.0	11.7	13.5	9.6	21.5	8
Race or Ethnic Origin:									
White, non-Hispanic	9,644	20.3	15.7	18.3	10.2	10.7	6.5	18.3	5
Black, non-Hispanic	754	18.7	12.8	19.3	12.2	17.0	3.6	16.5	5
Hispanic	1,420	16.9	9.1	23.6	12.7	10.2	9.4	18.0	6
Asian or Pacific Islander	108	4.7	22.3	34.5	11.2	10.0	12.8	4.5	5
American Indian or Alaskan	52	35.2	12.5	37.4	9.3	5.6	----	----	3

¹ Days away from work cases include those which require days away from work with or without restricted work activity.

NOTE: Because of rounding, components may not add to totals.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses, in cooperation with participating State agencies.

**Table 14. Percent Distribution of Occupational Injuries & Illnesses Involving Days Away from Work ¹
By Selected Occupations and Number of Days Away, Kansas, 1998**

Occupation	Total cases ²	Percent of days involving							Median days away from work
		1 day	2 days	3 to 5 days	6 to 10 days	11 to 20 days	21 to 30 days	31 days or more	
Total:	17,247	19.6	14.4	19.6	11.2	11.4	6.3	17.6	5
Managerial & professional specialty	762	26.7	10.8	14.5	12.3	14.8	3.3	17.7	5
Executive, administrative, & managerial	271	33.9	16.6	14.7	13.4	20.0	----	1.4	2
Professional specialty	491	22.8	7.6	14.3	11.7	11.9	5.1	26.7	7
Registered Nurses	263	26.5	11.9	17.5	16.7	13.4	1.4	12.7	3
Technical, sales, & administrative support	2,330	18.9	16.9	17.1	16.6	4.9	10.7	15.0	5
Technicians and related support	323	17.1	13.2	33.9	20.3	1.0	6.3	8.1	3
Sales	1,217	9.8	16.5	13.0	21.3	7.5	17.0	14.9	8
Supervisors & proprietors, sales occ.	417	4.1	3.1	11.8	20.6	5.5	19.9	34.9	25
Cashiers	254	8.0	30.2	2.9	16.5	----	41.7	0.7	7
Administrative support, including clerical	790	33.5	18.9	16.5	8.0	2.6	2.7	17.9	2
Traffic, shipping, & receiving clerks	81	27.6	27.2	20.6	5.7	10.8	8.1	----	2
Service	2,602	12.5	16.2	30.5	8.3	11.0	3.7	17.8	5
Protective service	126	4.1	28.9	13.0	2.5	26.7	----	24.7	16
Service, except protective & household	2,476	12.9	15.6	31.4	8.6	10.2	3.9	17.4	5
Waiters & waitresses	146	----	5.0	63.1	19.8	2.2	5.0	5.0	4
Cooks	328	10.1	10.1	40.6	13.6	5.0	8.0	12.5	5
Kitchen workers, food preparation	143	16.2	----	74.1	----	----	----	9.8	5
Health aids, exc. nursing	105	9.8	40.1	10.5	10.4	4.1	----	25.1	4
Nursing aids, orderlies, and attendants	837	14.8	15.4	21.7	5.9	15.6	1.1	25.4	5
Janitors & cleaners	577	15.9	16.4	32.2	10.9	13.2	5.8	5.6	4
Farming, forestry, & fishing	143	13.9	35.9	29.6	3.7	7.8	7.7	1.3	3
Farm workers	72	21.1	38.1	10.9	----	----	----	----	2
Grounds keepers & gardeners, exc. farm	60	7.9	40.1	18.5	8.8	18.6	3.0	3.1	3
Precision, production, craft, & repair	3,054	18.7	11.0	14.7	12.2	17.0	4.2	22.1	7
Mechanics & repairers	951	19.8	16.3	14.1	11.3	7.4	8.4	22.7	5
Automobile mechanics	170	10.4	31.4	3.7	20.6	19.1	6.0	8.8	6
Bus, truck, and stationary engine mechanics	174	3.9	3.8	5.1	1.7	2.1	8.0	75.4	40
Construction trades	1,161	17.8	5.1	17.3	12.8	16.0	1.6	29.5	9
Carpenters	236	3.6	10.2	8.4	28.6	38.2	3.8	7.1	8
Roofers	274	7.3	----	38.4	7.3	----	----	47.1	6
Precision production	871	20.2	14.1	10.8	11.6	27.4	3.4	12.6	7
Precision assemblers, metal	133	26.4	----	12.8	12.5	33.5	----	14.7	8
Butchers & meat cutters	338	22.5	7.7	13.4	16.3	30.2	1.7	8.3	7

**Table 14. Percent Distribution of Occupational Injuries & Illnesses Involving Days Away from Work ¹
By Selected Occupations and Number of Days Away, Kansas, 1998, continued**

Occupation	Total cases ²	Percent of days involving							Median days away from work
		1 day	2 days	3 to 5 days	6 to 10 days	11 to 20 days	21 to 30 days	31 days or more	
Operators, fabricators, & laborers	8,340	21.6	14.4	19.1	10.2	11.0	6.9	16.9	5
Machine operators and tenders	1,956	25.1	20.0	9.1	10.3	8.6	7.6	19.3	4
Fabricators, assemblers, & hand working	675	22.5	10.6	20.3	8.4	11.6	11.4	15.2	5
Welders & cutters	236	17.4	10.9	16.8	9.8	15.5	13.5	16.0	8
Assemblers	335	14.6	13.8	25.8	10.0	10.3	13.4	12.2	5
Production inspectors, testers, & weighers	156	14.1	9.5	10.2	1.8	0.9	51.1	9.4	25
Transportation & material moving ³	1,521	23.3	16.5	21.4	4.8	7.8	4.5	21.6	4
Truck drivers	1,113	26.9	15.7	24.7	5.6	7.8	3.1	16.2	4
Handlers, equipment cleaners, and laborers	4,032	19.4	11.6	23.1	12.7	13.7	5.0	14.5	5
Construction laborers	779	16.3	11.4	24.4	6.1	16.7	6.9	18.2	5
Stock handlers & baggers	163	24.3	14.2	25.5	11.3	9.6	6.3	8.7	3
Laborers, non-construction	867	10.7	8.7	19.3	25.3	21.5	3.2	11.2	8

¹ Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

² Excludes farms with fewer than 11 employees.

³ Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and employers in railroad Transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the in cooperation with State Agencies. Federal Railroad Administration, U.S. Department of transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal industries.

Note: Because of rounding, components may not add to totals.

Note: Dashes indicate data that are not available.

Source: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses

Table 15. Percent Distribution of Nonfatal Occupational Injuries and Illnesses Involving Days Away from Work¹
By Selected Characteristics and Median Days Away, Kansas, 1998

Characteristic ³	Total Cases	Percent of cases involving							Median days away from work
		1 day	2 days	3 to 5 days	6 to 10 days	11 to 20 days	21 to 30 days	31 days or more	
Private industry²: { 17,247 cases }	100.00	19.6	14.4	19.6	11.2	11.4	6.3	17.6	5
Nature of injury, illness:									
Sprains, strains	100.00	17.4	13.9	21.8	11.3	9.1	7.0	19.5	5
Bruises, contusions	100.00	30.0	21.5	25.5	12.3	3.9	0.7	6.1	2
Cuts, lacerations	100.00	31.5	14.7	19.6	12.4	16.9	2.5	2.4	3
Fractures	100.00	12.5	7.3	15.5	11.3	19.4	7.9	26.1	13
Heat burns	100.00	13.3	42.2	3.9	4.5	8.3	6.0	21.9	2
Carpal tunnel syndrome	100.00	6.6	3.0	14.8	8.7	30.2	9.8	26.9	15
Tendonitis	100.00	8.5	12.8	8.2	20.4	10.5	18.8	20.9	11
Chemical burns	100.00	62.6	9.9	12.3	11.7	3.5	----	----	1
Amputations	100.00	4.2	8.3	22.8	4.1	3.1	35.9	21.6	23
Multiple injuries	100.00	15.0	20.7	21.7	11.4	13.0	1.0	17.6	4
Part of body affected:									
Head	100.00	39.5	17.7	17.3	12.3	7.9	0.8	4.5	2
Eye	100.00	57.6	26.2	6.5	6.6	3.1	----	----	1
Neck	100.00	43.4	17.5	6.1	1.3	8.3	5.6	17.7	2
Trunk	100.00	14.5	13.9	20.5	13.1	11.3	6.5	20.2	6
Shoulder	100.00	12.0	8.8	20.0	13.2	9.1	3.6	33.2	8
Back	100.00	14.7	14.8	23.6	13.2	9.4	6.0	18.3	5
Upper extremities	100.00	18.2	14.7	17.7	11.5	14.6	7.3	16.0	5
Wrist	100.00	8.5	4.7	13.4	12.8	18.4	7.2	35.0	15
Hand, except finger	100.00	13.4	26.3	24.8	10.3	16.3	1.9	7.0	4
Finger	100.00	28.1	14.6	16.3	8.8	15.0	8.0	9.2	4
Lower extremities	100.00	18.1	11.5	23.2	8.9	10.5	8.1	19.6	5
Knee	100.00	10.3	10.3	21.7	7.2	11.3	11.3	27.8	12
Foot, except toe	100.00	24.0	12.8	31.2	13.7	2.0	3.3	13.1	3
Toe	100.00	17.5	8.2	32.1	13.7	18.4	8.4	1.7	5
Body systems	100.00	83.9	9.0	----	3.1	3.6	----	0.7	1
Multiple parts	100.00	20.3	22.4	18.1	7.9	9.0	2.6	18.8	3
Source of injury:									
Chemicals & chemical products	100.00	52.8	16.4	10.6	9.3	8.2	1.2	1.5	1
Containers	100.00	15.2	11.3	21.5	14.5	11.7	11.0	14.9	7
Furniture & fixtures	100.00	33.1	13.9	22.6	19.3	4.7	1.1	5.3	3
Machinery	100.00	16.5	12.8	14.9	11.8	20.8	9.3	13.9	8
Parts & materials	100.00	15.3	15.2	18.1	11.0	16.2	6.1	18.1	6
Worker motion or position	100.00	15.4	14.1	19.5	10.0	10.1	10.4	20.4	6
Floors, walkways, & ground surfaces	100.00	12.1	10.3	24.4	12.7	9.7	4.2	26.7	7
Tools, instruments, & equipment	100.00	29.5	17.1	17.9	10.4	10.7	4.1	10.4	3
Vehicles	100.00	29.1	15.4	15.6	9.6	13.3	1.0	16.0	4
Health care patient	100.00	10.6	17.9	21.6	9.7	15.5	1.0	23.8	5

**Table 15. Percent Distribution of Nonfatal Occupational Injuries and Illnesses Involving Days Away from Work¹
By Industry and Selected Characteristics, Kansas, 1998, continued**

Characteristic ³	Total Cases	Percent of cases involving							Median days away from work
		1 day	2 days	3 to 5 days	6 to 10 days	11 to 20 days	21 to 30 days	31 days or more	
Event or Exposure:									
Contact with objects & equipment	100.00	28.5	15.3	20.6	10.3	10.0	4.0	11.1	3
Struck by object	100.00	25.3	16.1	20.3	11.1	9.7	3.1	14.5	3
Struck against object	100.00	23.3	15.3	32.5	11.4	12.1	1.0	4.4	4
Caught in equipment or object	100.00	30.7	10.9	10.6	9.9	11.1	14.5	12.3	5
Fall to lower level	100.00	12.6	9.3	21.9	9.6	5.7	3.2	27.6	9
Fall to same level	100.00	16.9	11.7	24.6	13.5	13.3	5.4	14.6	5
Slips, trips, loss of balance - w/o fall	100.00	25.0	14.5	32.9	6.6	7.2	3.0	10.8	3
Overexertion	100.00	13.2	13.7	19.5	13.1	13.6	8.3	18.6	7
Overexertion in lifting	100.00	14.4	11.1	20.6	13.7	15.6	9.3	15.3	7
Repetitive motion	100.00	10.6	9.7	15.8	11.9	15.0	13.8	23.2	11
Exposure to harmful substances	100.00	42.7	27.3	7.6	6.2	5.3	2.8	8.1	2
Transportation accidents	100.00	16.7	13.4	9.8	11.0	25.8	1.2	22.3	10
Fires & explosions	100.00	20.9	22.8	35.2	----	11.0	----	10.1	4
Assaults & violent acts by person	100.00	32.4	26.5	22.9	----	----	18.2	----	2

Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

Excludes farms with fewer than 11 employees.

Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and employers in railroad Transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the in cooperation with State Agencies. Federal Railroad Administration, U.S. Department of transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal industries.

ote: Because of rounding, components may not add to totals.

ote: Dashes indicate data that are not available.

ource: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses

**Table 16. Percent Distribution of Nonfatal Occupational Injuries and Illnesses Involving Days Away from Work¹
By Major Industry Division and Median Days Away, Kansas, 1998**

Characteristic	Total Cases	Percent of cases involving							Median days away from work
		1 day	2 days	3 to 5 days	6 to 10 days	11 to 20 days	21 to 30 days	31 days or more	
Private Industry: { 17,247 cases }	100.00	19.6	14.4	19.6	11.2	11.4	6.3	17.6	5
Goods Producing:									
Agriculture, forestry, & fishing ²	100.00	9.6	17.0	30.2	16.5	11.1	6.7	8.9	4
Mining ³	100.00	14.6	10.9	13.2	14.0	18.7	4.0	24.7	10
Construction	100.00	21.0	7.4	17.7	7.5	14.7	5.6	26.1	7
Manufacturing	100.00	23.0	16.3	13.5	9.9	12.7	8.7	15.8	5
Durable goods	100.00	21.9	13.7	13.3	10.9	15.5	9.6	15.1	7
Nondurable goods	100.00	24.4	19.3	13.7	8.8	9.5	7.7	16.6	4
Service Producing:									
Transp. & public utilities ³	100.00	25.0	10.9	20.4	7.3	6.9	3.7	25.7	5
Wholesale trade	100.00	9.9	14.6	25.2	18.0	11.5	1.8	18.9	6
Retail trade	100.00	18.6	19.6	23.1	12.1	7.7	9.1	9.8	4
Finance, ins., & real estate	100.00	22.3	13.2	24.2	7.2	22.4	3.8	6.9	4
Services	100.00	17.7	14.0	21.9	12.8	12.0	5.3	16.2	5

¹ Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

² Excludes farms with fewer than 11 employees.

³ Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the in cooperation with State Agencies. Federal Railroad Administration, U.S. Department of transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal industries.

Note: Because of rounding, components may not add to totals.

Note: Dashes indicate data that are not available.

Source: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses

Appendix A

SCOPE OF THE SURVEY AND TECHNICAL NOTES

Scope of the Survey

The occupational injury and illness data reported through the annual survey are based on records which employers in the following industries maintain under the Occupational Safety and Health Act: agriculture, forestry, and fishing (SIC 01-09); oil and gas extraction (SIC 13); construction (SIC 15-17); manufacturing (SIC 20-39); transportation and public utilities (SIC 41-49); wholesale and retail trade (SIC 50-59); finance, insurance, and real estate (SIC 60-67); and services (SIC 70-89). Excluded from the survey are self-employed individuals; private households; farmers with fewer than 11 employees; employers regulated by other federal safety and health laws; and federal, state, and local government agencies.

Data conforming to OSHA definitions of recordable occupational injuries and illnesses for coal and lignite mining (SIC 11 and 12), metal and nonmetal mining (SIC 10 and 14), and railroads (SIC 40) are provided by the Mine Safety and Health Administration, U.S. Department of Labor, and by the Federal Railroad Administration, U.S. Department of Transportation.

Survey questionnaires were mailed to 3,650 sample units within the state. Approximately twelve percent of these were excluded from the final tabulation because they were no longer in operation, were not within the scope of the survey, were included in the report for another location, received duplicate survey forms for the same location, or were not mailable because of an inadequate address. Follow-up mailings and telephone calls to nonrespondents resulted in an overall usable response rate of 96 percent.

Survey Questionnaire

The survey questionnaire requested information concerning the average employment during the calendar year; total hours worked; the number of occupational illnesses by type (seven categories); the total occupational injuries and illnesses by type, i.e., fatalities, and nonfatal cases with and without lost workdays; the number of days away from work and days of restricted work activity; and case and demographic data for lost workday cases.

Federal grant arrangements specify that the respondent fill out a single report form. The data are then used to develop both state and national estimates. This elimination of duplicate reporting by respondents, in conjunction with the use of identical statistical techniques at the state and national levels, ensures maximum comparability of estimates.

Sample Design

The basic sample was selected by the Bureau of Labor Statistics to represent all non-government industries in Kansas and to produce estimates of the number of occurrences and incidence rates of occupational injuries and illnesses for the state. The universe was stratified into industries according to the 1987 edition of the Standard Industrial Classification Manual published by the Office of Management and Budget.

A sample size necessary to produce a certain level of precision in the estimates of incidence rates was then determined for each industry. Previous surveys conducted by the U.S. Department of Labor, Bureau of Labor Statistics, have given an indication of the variability of incidence rates within certain groups of industries. Using these measures of variability, the number of establishments in the industry, and the employment in large establishments, a sample size was then calculated for each industry. The number of employees in large establishments was used as a control on the sample size. When industries are dominated by a few large establishments, smaller samples are required if the large establishments are included in the sample with certainty. Industries with higher expected incidence rates displayed more variability and, therefore, were allotted a proportionately larger sample than industries with lower rates.

Within an industry it was known that the number of injuries and illnesses an establishment experiences will vary with the employment of the establishment. Because of this, the universe of establishments within an industry was stratified by employment and then an optimum allocation was achieved by distributing the sample to each size group proportionate to the total employment in the size group. This procedure assumes that the variance of the average number of injuries and illnesses per establishment in a size group is proportionate to the average establishment employment size group. Sample sizes were then adjusted to produce integral sampling ratios.

Estimating Procedures

By using a weighting procedure, units in the sample are made to represent all units in their size class for a particular industry. The inverse of the sampling ratio for the industry/employment-size class from which the unit was selected determines the weight. Weights of responding employers in a sampling cell are adjusted for the small proportion of survey forms not returned. Respondents are then shifted into the estimating cell determined by the employment and business activity report. Data for each unit are multiplied by the appropriate weight and nonresponse adjustment factor. The products are then aggregated to obtain a total for the estimating cell.

Since the universe file which provides the sample frame is not current to the reference year of the survey, data are adjusted to reflect current employment levels. In the annual survey, all estimates of totals are adjusted by the benchmark factor at the estimating cell level. The benchmarking procedure requires a source of accurate employment data which can be converted into annual average employment figures for separate estimates at the cell level.

Federal-State Cooperation

To eliminate duplicate reporting by respondents and ensure maximum comparability of estimates, survey respondents complete a single report form for national and state estimates.

Industrial Classification

Reporting units are classified into industries by their principal product or activity. The data are tabulated according to the 1987 edition of the Standard Industrial Classification Manual.

Appendix B

INSTRUCTIONS FOR COMPUTING INCIDENCE RATES FOR AN INDIVIDUAL FIRM

Incidence rates for an individual establishment or firm may be calculated by employers by using the same formula that is used to calculate industry-wide incidence rates from the annual occupational injury and illness survey. Employers may then compare their work injury and illness rates to state and national rates for their industry.

The formula requires: (1) the number of injuries and illnesses, and (2) the number of hours actually worked by all employees during the reference period. To produce an overall incidence rate proceed by determining the following:

1. The number of recordable occupational injuries and illnesses. This may be done by adding the totals for columns 1, 2, 6, 8, 9, and 13 of The Occupational Injuries and Illnesses Log (OSHA NO. 200).
2. The total number of hours actually worked during the year by all employees from payroll or other time records. The hours worked figure should not include any nonwork time even though paid, such as vacations, sick leave, holidays, etc. (If actual hours worked are not available for employees paid on commission, by salary, by the mile, etc., hours worked may be estimated on the basis of scheduled hours or eight hours per workday.)

The formula for computing the incidence rate is as follows:

$$\begin{array}{lcl} (1) & \text{Number of injuries and illnesses X 200,000} & \text{Incidence Rate} \\ (2) & \text{Employee hours worked} & \end{array}$$

This rate represents the number of injuries and illnesses occurring per 200,000 hours of work exposure, or the rate per 100 full-time equivalent workers. The same base is used in computing the occupational injury and illness rates for Kansas and the nation. It should be noted, for illnesses, the hours of work exposure should be increased in the formula to 20,000,000 (per 10,000 employees). The increase is due to the lower prevalence of illnesses in the work place.

An employer may compute rates for injuries, illnesses, lost workday cases, nonfatal cases without lost workdays, or the number of lost workdays. Simply replace the number of injuries and illnesses, (1) in the formula, with the measure for which the rate is being computed.

It is also possible to compute injury rates on a monthly, quarterly, or semi-annual basis, or even by department or any other grouping of employees. The formula remains the same except the constant now would be 16,667 for a monthly calculation, 50,000 for a quarterly calculation, or 100,000 for a semi-annual calculation. The number of cases or days in the numerator and the hours worked in the denominator would be for the same time frame as the constant.

Appendix C

GLOSSARY

Average Employment: The average number of full- and part-time employees who worked during the report period. This includes all classes of employees (e.g., administrative, seasonal, temporary, supervisory, clerical, professional, technical, sales, delivery, installation, construction, service personnel, as well as operating and related workers).

Establishment: A single physical location where business is conducted or where services or industrial operations are performed (e.g., factory, mill, store, hotel, restaurant, movie theater, farm, ranch, bank, sales office, warehouse, or central administrative office). For firms engaged in activities which may be physically dispersed such as construction, transportation, communication, and electric, gas, and sanitary services, records may be maintained at the place to which employees normally report each day. For personnel who do not primarily report or work at a single establishment, such as traveling salesmen, technicians, engineers, their establishment would be at the location from which they are paid or the base from which these personnel operate to carry out their activities.

First Aid Treatment: One-time treatment and subsequent observation of minor scratches, cuts, burns, splinters, and so forth, which do not ordinarily require medical care.

Hours Worked: Total hours worked by all employees. Includes all time on duty, but excludes vacation, holiday, sick leave, and all other nonwork time even though paid.

Incidence Rate: Number of injuries and/or illnesses, or lost workdays per 100 full-time workers. The rate is calculated as:

$$(N/EH) \times 200,000$$

where:	N	= number of injuries and/or illnesses, or lost workdays
	EH	= Total hours worked by all employees during the calendar year
	200,000	= base for 100 full-time equivalent workers (working 40 hours per week, 50 weeks per year)

Lost Workday Cases: Cases which involve days away from work or days of restricted activity, or both.

Lost Workdays: The number of workdays (consecutive or not), beyond the day of injury or onset of illness, the employee was away from work or limited to restricted work activity because of an occupational injury or illness.

- (2) Lost workdays, away from work: The number of workdays (consecutive or not) on which the employee would have worked but could not because of an occupational injury or illness.

Lost Workdays (continued):

- (3) Lost Workdays, restricted work activity: The number of workdays (consecutive or not) on which, because of an injury or illness the employee:
 - (a) was assigned to another job on a temporary basis,
 - (b) worked at a permanent job less than full-time
 - (c) worked at a permanently assigned job but could not perform all duties normally connected with it.

Low-Hazard Industries: Selected industries in retail trade; finance, insurance, and real estate; and services which are regularly exempt from OSHA recordkeeping. To be included in this exemption, an industry must fall within an SIC not targeted for general schedule inspections and must have an average lost workday case injury rate for a designated three-year measurement period at or below 75.0 percent of the U.S. private sector average rate.

Medical Treatment: Treatment (other than first aid) administered by a physician or registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment even though provided by a physician or registered professional personnel.

Nonfatal Case Without Lost Workdays: Any recordable occupational injury or illness case which does not involve a fatality or lost workdays.

Occupational Illness: Any abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to environmental factors associated with employment.

Occupational Injury: Any injury such as a cut, fracture, sprain, amputation, etc., which results from a work accident or from an exposure involving a single incident in the work environment.

Recordable Occupational Injuries and Illnesses: Any case which may be categorized in one the following classes is recordable:

- (1) occupational deaths, regardless of the time between injury, or length of illness, and death;
- (2) occupational illnesses; or
- (3) occupational injuries which involve one or more of the following: loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment (other than first aid).

Standard Industrial Classification (SIC): A classification system developed by the Office of Statistical Standards, Executive Office of the President/Office of Management and Budget, for use in the classification of establishments by type of activity in which engaged. Each establishment is assigned an industry code for its major activity which is determined by the product or group of products or services rendered. Establishments may be classified as 2-digit, 3-digit, or 4-digit industries, according to the degree of information available.

Work Environment: The physical location, equipment, materials processed or used, and the kinds of operations performed by an employee in the performance of his/her work, whether on or off the employer's premises.

Appendix D

RECORDKEEPING SUMMARY

Basic recordkeeping concepts and guidelines are included with instructions on the back of form OSHA No. 200. The following summarizes the major recordkeeping concepts and provides additional information to aid in keeping records accurately.

General concepts of recordability

1. An injury or illness is considered work related if it results from an event of exposure in the work environment. The work environment is primarily composed of: (1) The employer's premises, and (2) other locations where employees are engaged in work-related activities or are present as a condition of their employment. When an employee is off the employer's premises, work relationship must be established; when on the premises, this relationship is presumed. The employer's premises encompass the total establishment. This includes not only the primary facility, but also such areas as company storage facilities, cafeterias, and restrooms. In addition to physical locations, equipment or materials used in the course of an employee's work are also considered part of the employee's work environment.

2. All work-related fatalities are recordable.

3. All recognized or diagnosed work-related illnesses are recordable.

4. All work-related injuries requiring medical treatment or involving loss of consciousness, restriction of work or motion, or transfer to another job are recordable.

Analysis of injuries

Recordable and nonrecordable injuries. Each case is distinguished by the treatment provided; i.e., if the injury was such that medical treatment was provided or should have been provided, it is recordable; if only first aid was required, it is not recordable. However, medical treatment is only one of several criteria for determining recordability. Regardless of treatment, if the injury involved loss of consciousness, restriction of work or motion, or transfer to another job, the injury is recordable.

Medical treatment. The following procedures are generally considered medical treatment. Injuries for which this type of treatment was provided or should have been provided are almost always recordable if the injury is work related:

- Treatment of **INFECTION**
- Application of **ANTISEPTICS** during second or subsequent visit to medical personnel
- Treatment of **SECOND OR THIRD DEGREE BURN(S)**
- Application of **SUTURES** (stitches)
- Application of **BUTTERFLY ADHESIVE DRESSING(S)** or **STERI STRIP(S)** in lieu of sutures
- Removal of **FOREIGN BODIES EMBEDDED IN EYE**
- Removal of **FOREIGN BODIES FROM WOUND**; if procedure is **COMPLICATED** because of depth of embedment, size, or location
- Use of **PRESCRIPTION MEDICATIONS** (except a single dose administered on first visit for minor injury or discomfort)
- Use of hot or cold **SOAKING THERAPY** during second or subsequent visit to medical personnel

- Application of hot or cold **COMPRESS(ES)** during second or subsequent visit to medical personnel
- **CUTTING AWAY DEAD SKIN** (surgical debridement)
- Application of **HEAT THERAPY** during second or subsequent visit to medical personnel
- Use of **WHIRLPOOL BATH THERAPY** during second or subsequent visit to medical personnel
- **POSITIVE X-RAY DIAGNOSIS** (fractures, broken bones, etc.)
- **ADMISSION TO A HOSPITAL** or equivalent medical facility **FOR TREATMENT**.

First aid treatment. The following procedures are generally considered first aid treatment (e.g., one-time treatment and subsequent observation of minor injuries) and should not be recorded if the work-related injury does not involve loss of consciousness, restriction of work or motion, or transfer to another job:

- Application of **ANTISEPTICS** during first visit to medical personnel
- Treatment of **FIRST DEGREE BURNS(S)**
- Application of **BANDAGES(S)** during first visit to medical personnel
- Use of **ELASTIC BANDAGES(S)** during first visit to medical personnel
- Removal of **FOREIGN BODIES NOT EMBEDDED IN EYE** if only irrigation is required
- Removal of **FOREIGN BODIES FROM WOUND**; if procedure is **UNCOMPLICATED**, and is, for example, by tweezers or other simple technique
- Use of **NONPRESCRIPTION MEDICATIONS AND** administration of single dose of **PRESCRIPTION MEDICATION** on first visit for minor injury or discomfort
- **SOAKING THERAPY** on initial visit to medical personnel or removal of bandages by **SOAKING**
- Application of hot or cold **COMPRESS(ES)** during first visit to medical personnel
- Application of **OINTMENTS** to abrasions to prevent drying or cracking
- Use of **WHIRLPOOL BATH THERAPY** during first visit to medical personnel
- **NEGATIVE X-RAY DIAGNOSIS**
- **OBSERVATION** of injury during visit to medical personnel.

The following procedure, by itself, is not considered medical treatment:

- Administration of **TETANUS SHOT(S)** or **BOOSTERS(S)**. However, these shots are often given in conjunction with more serious injuries; consequently, injuries requiring these shots may be recordable for other reasons.

Reminder: Work-related injuries requiring only first aid treatment and that do not involve any of the conditions in item 4 above, are not recordable.

This Report Was Prepared by:

**Center for Health and Environmental Statistics
Lorne A. Phillips, Ph.D., Director and State Registrar**

**Office of Health Care Information
Elizabeth W. Saadi, Ph.D., Director**

Author: Charles L. Sann

Editor: Charles Crevoiserat

Reviewers: Elizabeth Saadi, Ph.D., and Lorne A. Phillips, Ph.D.